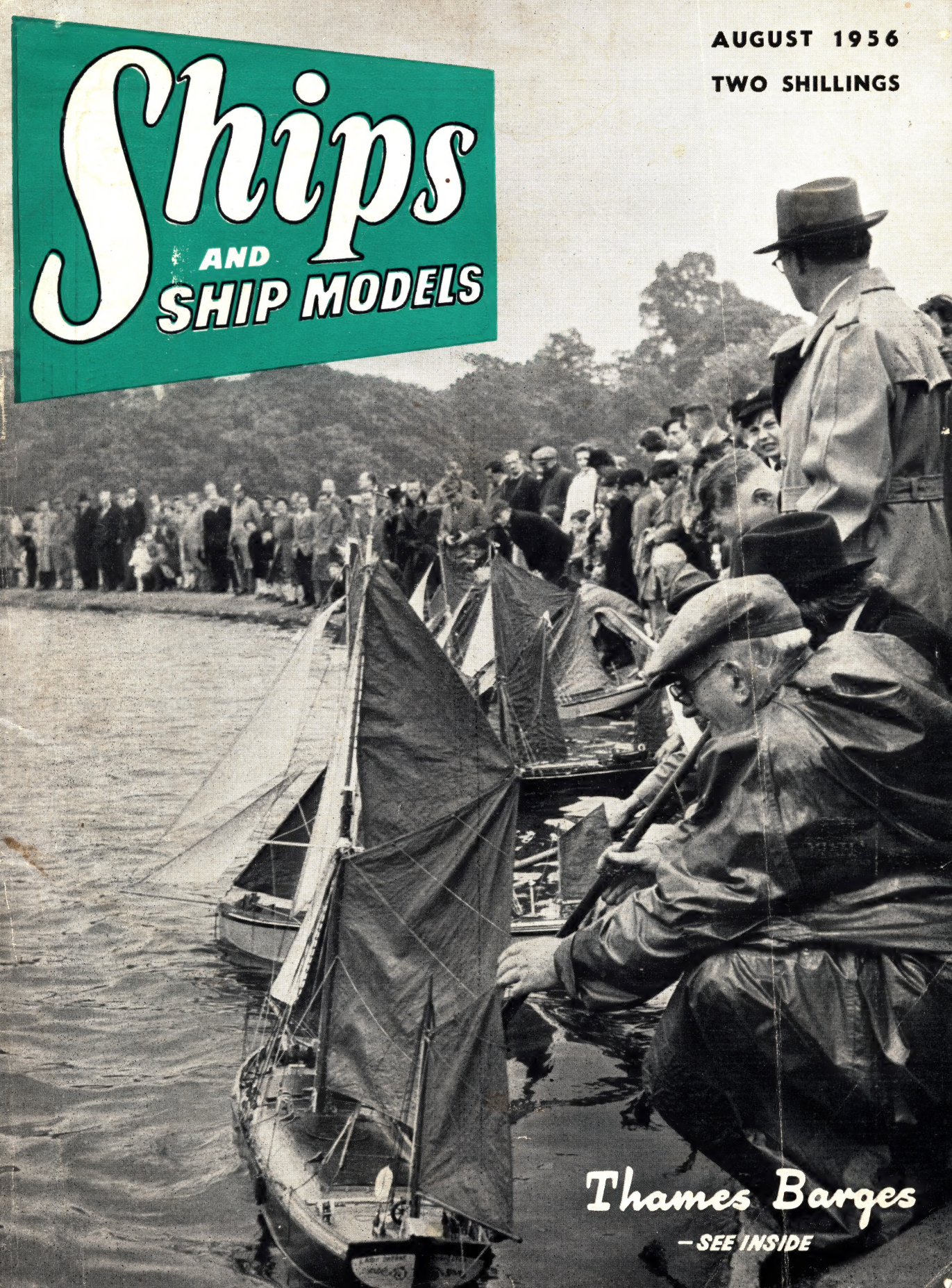
Ships AND SHIP MODELS

AUGUST 1956
TWO SHILLINGS



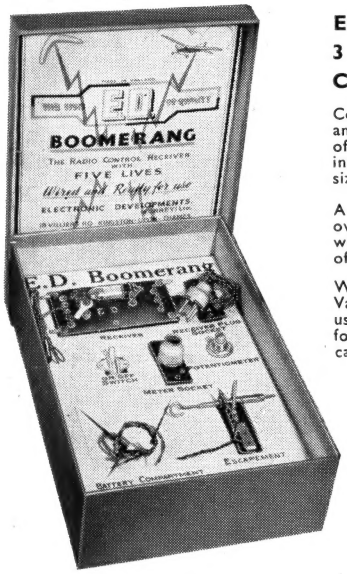
Thames Barges

— SEE INSIDE

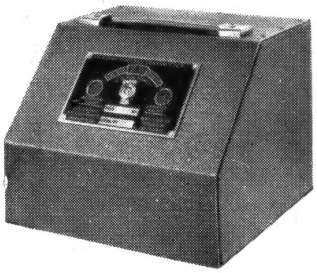
Radio Control of Models by

E D
TRADE MARK

Radio Control Equipment which will enable the user to operate, independently, more than one control, is now demanded by most enthusiasts.
The reliability and ease of control of the Tuned Reed System, pioneered by E.D., has after long and exhaustive tests, been amply demonstrated.
Success after Success in open competitions has proved that there is nothing to compare with the Tuned Reed System developed by E.D.
The three models illustrated will adequately meet the demands of Radio Control enthusiasts.
An entirely new model "The EVEREST," a Tuned Reed, 6-Channel Radio Control Unit with Hard Valves is now in production. Full details will be announced shortly. Price complete £29 3 11.



E.D. Mk. II MINIATURE 3 VALVE RADIO CONTROL UNIT

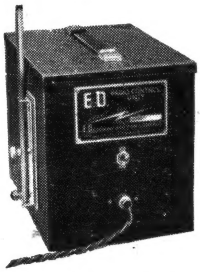


Comprises Transmitter and Receiver and combines the three main features of range, reliability and safety against interference, but with reduced weight, size and battery consumption.

A standard battery pack will give over three hours continuous operation with a receiver and batteries weight of only 10½ oz.

We specially emphasise that deaf-aid Hard Valves with a life of over 3,000 hours are used in the receiver. The transmitter is wired for dual purpose use and will operate either carrier or modulated receivers.

PRICE COMPLETE	£17 10 4
Receiver (3 Hard Valves) ...	£10 19 0
Transmitter and Aerial ...	£6 11 5



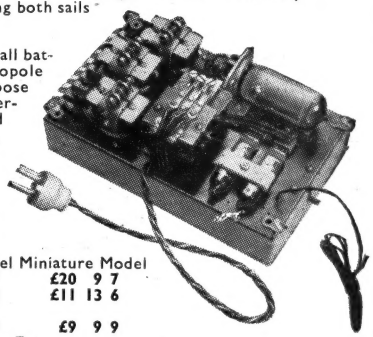
E.D. Mk. IV RADIO CONTROL UNIT

Tuned Reed—3 Channels

FOR MULTIPLE REMOTE CONTROL OF MODELS

The last word for the control of all models which demand progressive, personal and accurate following of multiple orders.

The complete receiver and battery assembly can be used for model planes of down to 66 in. wing span and boats of 30 in. length. It is also the only type of equipment capable of operating both sails and rudder of model sailing boats.



A self-containing transmitter housing all batteries and with 8-ft. sectional monopole aerial is supplied with a general purpose hand-control box for three channel operation. The receiver uses standard hard valves throughout, with an average life of 3,000 hours. Receivers are pre-tuned to the transmitter and once installed, there is no necessity for any further adjustment.
The receiver output will operate either escapement or electric motors.

	Senior Model	Miniature Model
PRICE COMPLETE Less Escapement ...	£24 1 9	£20 9 7
RECEIVER, 3 Hard Valves	£15 12 0	£11 13 6
TRANSMITTER, CONTROL BOX and AERIAL	£9 9 9	£9 9 9

All prices include Purchase Tax.

E.D. "BOOMERANG"

A Radio Control Unit, supplied with either soft or hard valves, completely wired and ready for use in your Model Plane or Boat. The Soft Valve provides five different aerial tappings which enable the aerial load to be matched to the valve. A new valve is worked on the A.1 tapping for maximum sensitivity. When the required 1.5 M.A. current becomes unobtainable the A.2 tapping will give a further period of sensitivity. This procedure is used progressively through all five stages, thus lengthening the life of the valve by five times.

Simplicity itself to instal and most economical in use.

PRICE COMPLETE	£11 18 6
Receiver and Escapement, Hard or Soft Valves	£6 8 11
As above, less Escapement	£5 3 9
Transmitter and Aerial	£5 11 4

Write for our new illustrated list giving full details of E.D. Radio Control Units, Spare Parts and Accessories, etc., and the range of E.D. Diesel Engines.

E.D. ELECTRONIC DEVELOPMENTS (SURREY) LTD
DEVELOPMENT ENGINEERS
PHONE: MOLESEY 6037-6038
ISLAND FARM RD. WEST MOLESEY, (SURREY) ENGLAND.
GRAMS: "EEDEE" EAST MOLESEY

M.S. NORTHERN STAR

A 54" CABIN CRUISER
15" BEAM
50lb LOAD CAPACITY

BASED ON
MESSRS. BOLSON & SONS LTD.
40 ft. CUSTOMS LAUNCH

FOR RADIO CONTROL

PRODUCED IN CLOSE CO-OPERATION WITH THE TYNESIDE BRANCH OF THE INTERNATIONAL RADIO CONTROLLED MODELS SOCIETY, WHOSE EXPERT ADVICE AND ASSISTANCE WE GRATEFULLY ACKNOWLEDGE

CHECK THESE OUTSTANDING FEATURES

For Powerful Electric Motors or Diesel Engines, 2.5 to 10 c.c. Kit includes finished Stern Tube, Shaft and Skeg, Set of Engine mounting steel brackets and special "Lockfast" engine mounting bolts. Special "KenTru" construction ensures speedy, accurate building. Invented by our designer, Mr. T. R. Kennedy, "KenTru" construction guarantees that even the novice without previous modelling experience will be able to speedily and accurately construct this large model Customs Launch. Unsinkable, 1½ cubic ft. buoyancy chambers. Underwater Hull design incorporates a flared bow, V-bottom, Hard Chine construction, Cabin lifts off in one piece exposing and making immediately accessible all engine, Radio Units, and Batteries. Enormously strong, only the Best Plywood used. Enormous Development Potential. Ideal for the Radio Control experimenter who requires extra space and weight carrying ability for new equipment. TO BE REVIEWED IN THIS MAGAZINE

OBTAINABLE ONLY FROM

TELEPHONE : 22016 NEWCASTLE

THE MODEL SHOP

(NEWCASTLE UPON TYNE) LTD.

SEND 3d. FOR LISTS

18 BLENHEIM STREET, NEWCASTLE UPON TYNE

1956 OCEAN RACE FOR SAILING TRAINING SHIPS

A new range of authoritative plans for scale models of sailing training ships is now available. All these drawings are from the board of

HAROLD A. UNDERHILL, A.M.I.E.S.,

and include modern ships such as *Almirante Saldanha*, *Danmark*, *Nippon Maru* and *Kaiwo Maru*; the barque *Gorch Fock* (sister of the American training ship *Eagle*) and others of her class. Among the smaller ships are *Joseph Conrad* and *Georg Stage*, while the older cargo-cadet ships include the *L'Avenir*, *Herzogin Cecilie* and others.

All the plans are fully detailed for first-class scale models.

Our new catalogue carrying illustrations of these plans is not yet available, but a temporary list of additions is being included in our present catalogue meantime. Price 1s.

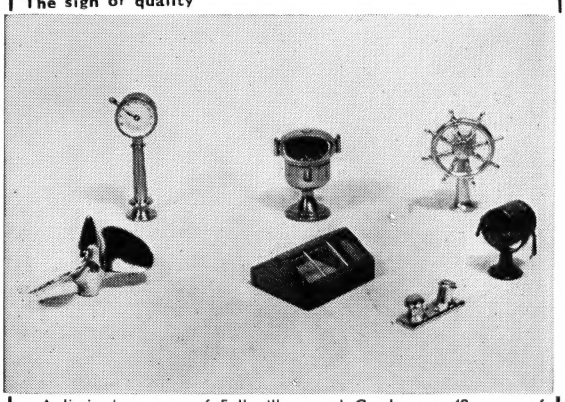
The plans can be obtained from any model dealer or direct from

HOLBORN DRAWING & TRACING CO.
60-62, Queen Elizabeth Avenue
Hillington
GLASGOW, S.W.2

WEB
The sign of quality

LOOK : WONDERFUL NEWS

OUR No. S412 Best Union Silk Sailcloth approx. 42" wide is now 7s. 6d. per yard plus post. Order while the going is GOOD



A limited amount of Fully Illustrated Catalogues, 48 pages of "WEB" Model Productions, faithfully reproduced from the actual models. Price 3/-.

If you have difficulty in obtaining our products, send your order to our works. We regret that NO enquiries can be answered unless a stamp is enclosed for return postage (overseas excepted).

THE WEB MODEL FITTING CO.
204, High Road, Wood Green, London, N.22, England.
Telephone : Bowes Park 4683.

Is your wireless set WATER PROOF?

The lifeboatman's *MUST* be . . . and that adds to its cost. You can help the lifeboat Service to maintain its efficiency by sending a contribution, however small, to

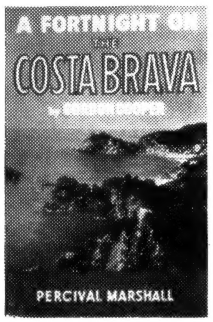
THE ROYAL LIFE-BOAT INSTITUTION

42, GROSVENOR GARDENS, LONDON, S.W.1

Treasurer : His Grace The Duke of Northumberland
Secretary : Col. A. D. Burnett Brown, O.B.E., M.C., T.D., M.A.

Holiday Guides that are ★ DIFFERENT ! ★

FORTNIGHT HOLIDAY GUIDES give you vital facts and information nowhere else available in such handy form. Each volume is of uniform format, scope and treatment and is absolutely up-to-date. They help you to make your holiday choice by presenting an impartial picture of the country or resort you propose to visit. Continental titles advise you on climate, local customs, living standards, types of hotel accommodation and prices, and also give useful help as to preparations for your visit, essentials to take, &c. Each 3s. 6d., postage 3d.



CONTINENTAL TITLES: Austria, Balearics, The Bay of Naples, Belgium, The Black Forest, Brittany, Costa Brava, Denmark, The French Riviera, The Grand Tour, The Italian Lakes, The Italian Riviera, The Loire Valley, Madeira and the Canaries, Norway, Paris, The Rhineland, Rome, Spain, Switzerland, Tuscany & Umbria, The Western Mediterranean, Yugoslavia.

HOME TITLES: The Channel Islands, Cornwall, Devon, East Coast, Firth of Clyde, Killarney, Kent, North Wales, Not Sixty Miles from London, The Wye Valley, The Yorkshire Coast.

Obtainable from all good booksellers or the publishers, Percival Marshall & Co. Ltd., 19-20, Noel Street, London, W.1.

Ian Allan

shipping books

Each of the following new editions of the popular pocket-sized **abc** Shipping books contains 56-64 pages of the latest information available, systematically arranged and fully illustrated.

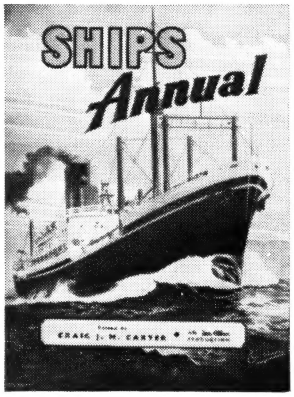
abc BRITISH TUGS	**2s. 6d.**
abc OCEAN LINERS	**2s. 6d.**
abc OCEAN TANKERS	**2s. 6d.**
abc OCEAN FREIGHTERS	**2s. 6d.**
abc WARSHIPS	**2s. 6d.**
abc COASTAL CARGO SHIPS	**2s. 6d.**
abc COASTAL PASSENGER SHIPS	**2s. 6d.**
abc BRITISH RAILWAYS STEAMERS	**2s. 0d.**

and a special large edition which covers all aspects of the sea and ships to be published shortly—

abc THE SEA AND SHIPS **5s. 0d.**

⚓ ⚓ ⚓ ⚓

Place your order now for the new 1957



SHIPS annual

96 pp. ; 10″ x 7½″. Over 100 photographs. Colour plate. Interesting articles written by experts. Attractive four-colour jacket.

PRICE 10/6

Publication 1st September

Ian Allan Ltd

HAMPTON COURT, SURREY

Printed in Great Britain for the Proprietors by Electrical Press Ltd., Cordwallis Works, Maidenhead, Berks, and published by Percival Marshall & Co. Ltd., 19-20, Noel Street, London, W.1.
Registered for transmission by Magazine Post to Canada including Newfoundland.

Ships AND SHIP MODELS

INCORPORATING MODEL SHIPS & POWER BOATS

Vol. IX. No. 103. AUGUST 1956

CONTENTS

The Ship's Log	241
Old Timers on the Round Pond: The Model Barge Rally	242
Pages from a Marine Sketchbook—4	244
Building an early Sixth Rate—6	245
Worming and Turning	249
In Search of a Schooner	250
Naval Photograph Club	253
Radio Control at Poole Regatta	254
Jason's Notes	256
The Gloucester Fishing Schooners—3	257
The Road to the Isles	260
Thames Barge Race	262
A Portuguese Water-Nymph	264
Ships in the News	266
A Ship Modeller's Scrapbook	268
Nautical Book Reviews and Queries	270
Sherlock at Sea	271
Mailboat	272
News from the Clubs	274

SHIPS AND SHIP MODELS is always on the lookout for first rate illustrated articles, and readers are invited to submit contributions. Constructional details of ship models of all types are required and articles relating to model yachts and yachting. Manuscripts should be sent to the Editor, with stamped envelope for return if unsuitable.

THE SHIP'S LOG

THE RADIO CONTROL of model yachts has been a vexed question for many years. The connection between yachting and electronics seems remote, and the efficiency of vane control for model yachts is such that anything better seems unnecessary.

This may be because we are so used to the present system of racing model yachts but if the subject is approached with an unbiased mind, it becomes obvious that to race a model over a triangular course as though one were actually on board is a great improvement on the present system. The recent radio regatta at Poole gave ample proof that such racing is not only possible but is already being done.

Power boat and model yacht enthusiasts are often puzzled by the low esteem in which their sport is held by certain town and district councils. Tennis, bowls, golf, swimming and other sports are usually recognised and large amounts of money are spent on them, but when it comes to sailing boats, a share of the children's pond only is allowed—and then often during late evening or on Sunday mornings when the children are expected to be elsewhere.

Surely sailing model boats, whether power or sail, is as healthy a sport as any? The official mind does not seem to be able to discriminate between toy boats and masterpieces of design and construction. Not only does model sailing provide a healthy outdoor recreation for the body but it provides a much needed stimulus for the mind and hands. In these days of passive forms of entertainment anything which provides exercise for both body and mind has a value which deserves more appreciation than it gets.

★ ★ ★

IN THREE WEEKS' time—on August 22—the Model Engineer Exhibition opens at the New Horticultural Hall, Westminster.

The competition entries are coming in well, the demonstrations and special attractions will be better than ever and a particularly fine show is anticipated.

An interesting feature will be the display of models from Russia. These are mainly working models of large steamers and from the available pictures they seem to be of high quality.

Published on the first of each month by PERCIVAL MARSHALL & COMPANY LTD., 19-20, NOEL STREET, LONDON, W.1

Telephone: GERrard 8811 *Annual Subscription 26s. 0d. post paid*

Model Engineer EXHIBITION

GREATEST EVENT IN THE MODEL MAKING WORLD

EVERY kind of land, sea and air model, all incredibly detailed and accurate, can be seen at this fascinating Exhibition, as well as many kinds of amateur craftsmanship. Model makers from all over Europe, including the Soviet Union, will be competing for the numerous awards offered by the Organisers and Friends of the Exhibition. The *Model Engineer* Students' Cup attracts many fine exhibits from youths under 18 and you will see some wonderful entries for the Duke of Edinburgh Trophy. Then, of course, there are the Club Stands, the Trade Stands and the Special Attractions. These are the best ever. In addition to the various activities on the marine tank and special demonstrations by craftsmen of interest to ship modellers, visitors can see the following:

A full-scale model of the cab of a British Railways locomotive of the latest type, fitted with all the actual controls. Visitors will be able to look through the driver's window and get the impression of a railway journey at 60 m.p.h. as seen from the footplate.

An oval shaped tramway layout, size 24 ft. by 12 ft. in ¾ in. scale, loaned by the Tramway & Light Railway Society. It is equipped with overhead current collection and will be operated by members of the Society.

This year, activities on the Marine Tank will include demonstrations by members of the International Radio Controlled Models Society. There will be "round the pole" demonstrations of power boats and a seaplane operating on a control-line basis will take off and land on the water.

Demonstrations of the model maker's craft have proved so popular that the organisers have divided this year's demonstrations into three sections or stands. You will be able to see Mr. H. W. Beesley demonstrating hull construction, Mr. J. T. Brittain sail making. Mr. R. J. Collins will be showing the methods used in building period ships, in particular the early Sixth Rate model currently described in *Ships and Ship Models*. And finally, Mr. G. H. Draper will be making ships' boats and will be demonstrating the cutting and preparation of timber for the built-up ship model. There will also be demonstrations of soldering, brazing, boiler making, model aircraft construction, etc.

OTHER ATTRACTIONS

A steam-driven fairground roundabout with steam engine and mechanical organ. The scale is 2½ in. to 1 ft. and the model is 6 ft. in diameter.

There will also be the passenger-carrying locomotive track and two wonderful model railway layouts.

NEW HORTICULTURAL HALL • AUG 22—SEPT 1

WESTMINSTER S.W.1 • 11 a.m.—9 p.m. (Sunday excepted)

Admission 3/-

1/6 for under 15's

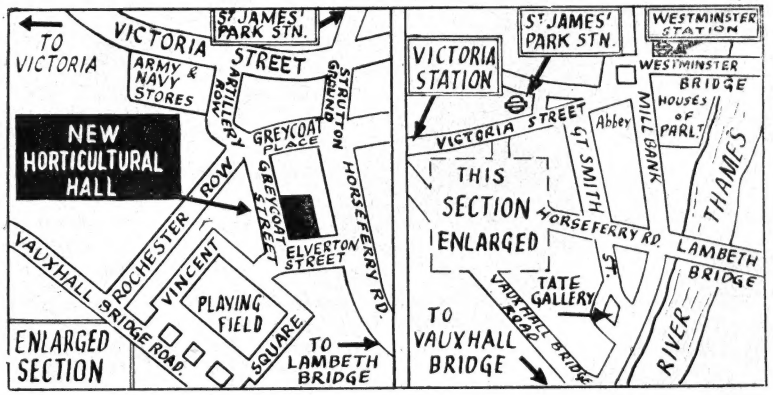
GET THERE by any of these routes :

St. James's Park Station by Circle or District tube train.

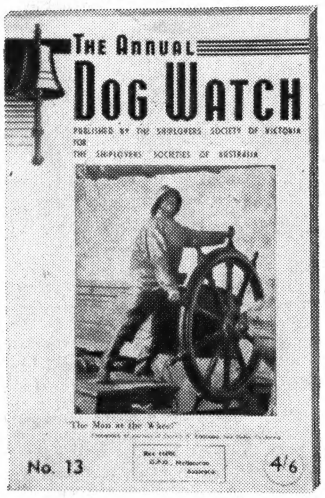
Victoria Street. Buses: 10, 11, 24, 29, 39, 46, 76, 134, ask for Army & Navy Stores.

Vauxhall Bridge Road. Buses: 2, 2a, 36, 36a, 57, 69, 169, 181, 185, ask for Rochester Row.

Horseferry Road. Buses: 10, 46. Ask for New Horticultural Hall.



No. 13 *Just Published*



The Annual DOG WATCH

Published by the Shiplovers' Society of Victoria, Australia

A MISCELLANY OF MARITIME HISTORY, ADVENTURE AND REMINISCENCE

138 pages. Nineteen articles with illustrations. 4s. 6d., postage 3d.

IN THIS ISSUE

The chequered career of the *Tyburnia*, a frigate built for the Eastern trade. Happy memories of apprenticeship days on Australian coasters 45 years ago. Across the world on a salvage tug. New Year revels in Honolulu. Christmas as celebrated on a great liner. Some hair raising moments off Cape Horn. An ill-fated voyage out of San Diego, California. Hell's Gates, Macquarie Harbour, Tasmania. "Jack of all trades": some seafaring jobs that live up to the phrase. A centenary missionary cruise to the Fiji Islands. On the fogbound New England - Novia Scotia run. Memories of the barque *Carlisle Castle*. Some Melbourne coal hulks with a proud history. A junior engineer gets his chance. Intrepid South Sea pioneers. A first class passage in the days of sail. What happened to the pilot schooner *Rip*. Early exploration of the Australian coastline.

The new issue is available in limited quantities and by post only. To avoid disappointment, order your copy now. Price 4s. 9d. post free from:

PERCIVAL MARSHALL & CO. LTD., 19-20 Noel Street, London, W1

"SHIPS AND SHIP MODELS"

SALES AND WANTS

Private: 3d. *per word.* *Trade*: 6d. *per word*
Use of Box No. 1s. *extra.* *Minimum* 12 *words*

The Advertisement Manager reserves the right to refuse or suspend advertisements, without giving any reason. No definite date of insertion can be guaranteed, and although every care is taken to avoid mistakes, we cannot be held liable in any way for printing errors or omissions. Receipt by the publishers of advertisers' "copy" for publication implies acceptance of these conditions by the advertiser.

Whilst every care is taken to exclude advertisements from doubtful sources, no responsibility can be accepted by the publishers for the bona fides of advertisers.

SAILS for Model Yachts. All classes. Terylene, Egyptian Cotton. Quotation from ROBERTS, 14, Saxon Road, Hove, Sussex.

WARSHIP DRAWINGS now available from Norman A. Ough, 98, Charing Cross Road, London, W.C.2. (TEMPLE BAR 3926.) Scale 1″ = 16′ (detail 1″ = 8′). DESTROYERS: "V" class VEGA (1916-45) 12s. 6d. "D" class DARING (1934), £1. "Tribal" class MATABELE (1936), £1. "Battle" class, CADIZ, £1. CRUISERS: DIDO (1939-56), £1. "Lines" of DIDO, 10s. "Cardiff" class CURACOA, £1. SHEFFIELD (as in 1956), £1. "Lines" of SHEFFIELD, 10s. "Algerine" class minesweeper (1″ = 8′) MARVEL, 10s. "Lines" of MARVEL, 10s. Corvette HEDINGHAM CASTLE (1″ = 8′), £1. SUBMARINES: (all 1″ = 8′), E29, L52 and "O" class OLYMPUS, 10s. each. BATTLE-CRUISER: LION (1″ = 16′) as at Jutland, £1. "Lines" 10s. "K" class destroyer KASHMIR ($\frac{1}{8}$″ = 1′), £1. "Lines" 10s.

WANTED—WORLD WAR I PERIOD wooden ship identification models by Boucher of New York 1″ = 100′ scale. Japanese made wooden naval identification models World War II, 1″ = 100′ scale. Viking metal model liners and warships (German—pre-war manufacture), 1″ = 1250′ scale—especially want harbour set, complete—offer £3. British naval identification models, 1″ = 100′, all navies and merchant marines (by Bassett-Lowke, Stewart-Reidpath, Palatial Mfg., etc.). Merchant ships and liners, 1″ = 100′ scale, and landing craft, 1″ = 50′ scale by Bassett-Lowke. Write and describe. These six editions only: Jane's "Fighting Ships," 1919 edition; Jane's "All The World's Aircraft," 1919 edition; Gröner's "Die Handlesflotten der Welt," 1942-43 edition. Weyer's "Flottentaschenbuch," 1922 and 1942/43 editions; Clowes' 'Naval Pocket-Book," 1914 edition. Excellent prices paid.—DON SCHROTH, P.O. Box 91, Blue Island, Illinois, U.S.A.

WATCHES, any make, repaired (with guarantee) post confidently to YOUNG & SON, 133, London Road, Chippenham, Wilts.

WATER-LINE MODEL plans from 1s. 9d., post paid.—CAMAS, 10, Mark Street, Wallasey.

THE 6-METRE YACHT "GREYWING," by Alexander. Stainless steel fittings, four suits of sails, immaculate. Cost £85 new. Offer nearest £15.—WOODCOCK, 810A, Walsall Road, Great Barr, Birmingham.

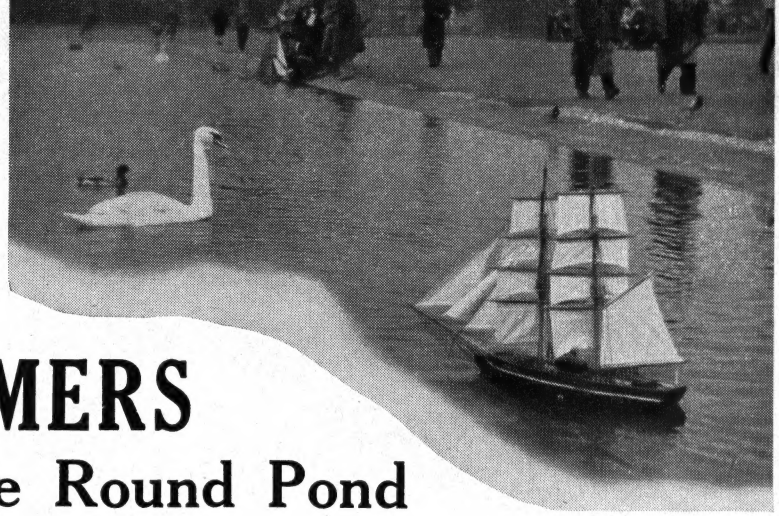
MARITIME BOOKS, old and new, for sale and wanted.—NORMAN KERR, Bookseller, Cartmel, Lancashire.

DETAILED WORKING MODEL paddle steamer, also tug and liners. Details—40, Chichester Road, Edmonton.

CONDITIONS OF SALE AND SUPPLY

This periodical is sold subject to the following conditions, namely, that it shall not, without the written permission of the publishers first given, be lent, resold, hired out or otherwise disposed of by way of trade except at the full retail price of 2s. 0d. and that it shall not be lent, resold, hired out or otherwise disposed of in a mutilated condition or in any unauthorised cover by way of trade; or affixed to or as part of any publication or advertising, literary or pictorial matter whatsoever.

" Mavourneen " does it again ! Last year's barge-race winner gains Thames club's new trophy



OLD TIMERS
on the Round Pond

MEMBERS of the Thames Shiplovers' and Ship Models' Society held their sixth annual rally of sailing ship models on the Round Pond, Kensington Gardens, London, recently.

The models included squareriggers, topsail schooners, fore-and-aft rigged craft and a fleet of spritsail barges. This fleet was started six years ago with Mr. Starkey's *Lily* and Mr. Foreman's *Lady Daphne* and now includes nine barges of various types, all built to ½ in. scale. Others are in process of building.

One of the aims of H. V. Evans—founder of the society—in organising the rally was to encourage the sailing of models of sailing prototypes—more especially spritsail barges and squareriggers.

The pictures show the realism already achieved in the models and their attractive appearance on the water. It is still a problem to control a model barge under sail, especially to run a race between a number of them. The chief concern of the organisers is that the realistic appearance of the models must be preserved.

Some of the boats fell foul of one another at the start of the barge race and but for this *Lady Daphne* would probably have been the winner. However, last year's winner *Mavourneen* (G. Fitzgerald) was first across the pond, gaining the new trophy presented by the Thames Barge Sailing Club.

The models were also judged on their constructional standards and their sailing qualities and appearance on the water. On this score three models tied for highest marks: *Youngarth* (G. R. Sinclair), *Janice* (J. J. Starkey) and *Will Everard* (R. A. Brown). All three have won high awards in the Model Engineer exhibition. *Youngarth* is a well-detailed model, and her builder brought her up from Exeter to compete. *Will Everard*, with her fine metal hull and well-proportioned rigging and gear, created a mild sensation in last year's M.E. exhibition.

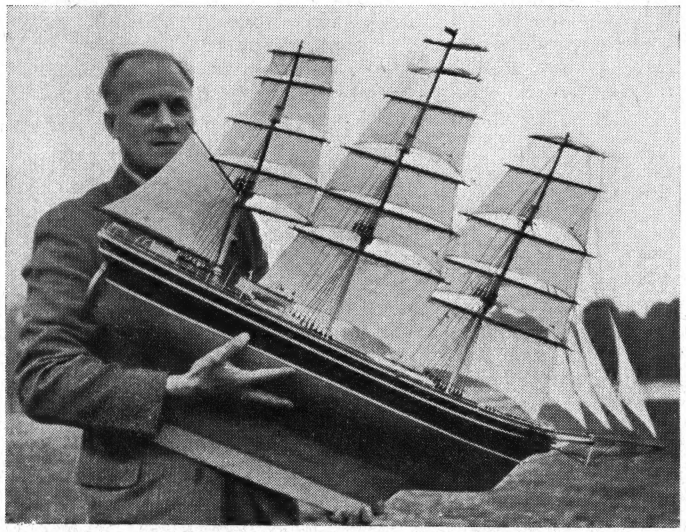
The smallest barge, *Irene*, a stumpie (C. B. Maycock), made a good impression with her sailing qualities and was remarkably fast, but in an extra hard squall she was laid over on her beam ends and she quickly filled and sank. The same fate overtook *Eileen* (H. W. Beesley), but it was here first day out and she had no buoyancy tanks.

Both models were recovered the following day.

There were 13 entries in the square-rigged class. For convenience the three topsail schooners were included, one being the four-masted *Alain Gerbault* (P. Blanchot) which was in last year's M.E. exhibition.

Another of the topsail schooners was a dainty little ¼ in. scale two-masted *Deliverance* built and sailed by Norman A. Ough. The proportions

P. Gould with his " Cutty Sark "—winner in the square-rigged class



D. S. Paterson with his model of a Brixham trawler

News from the clubs

THOSE of the model yachting fraternity who were present at the recent M class M.Y.A. Championship at Dovercourt were particularly pleased to see Mr. Seabrooke back at the pond-side.

Early this year he underwent a serious operation and was forced to resign from the chairmanship of the Model Yachting Association—a position he had occupied with distinction. At a recent function his M.Y.A. colleagues presented him with a gold wristwatch.

Mr. Seabrooke has resumed duties with the M.Y.A., having been appointed council member for the H.Q. and Individual Members' Division in place of Otto Steinberger, who resigned from this position on being appointed chairman.

MODEL YACHTING ASSOCIATION

The 1956 British Open Championship for A class yachts will be held at Gosport from August 5 to August 12.

On September 8 and 9, the 36 in. Restricted Class regatta will be held at Hove. Last day of entry, August 11. Full particulars from secretary: F. JENNINGS, Ardingly College, Haywards Heath, Sussex.

INTERNATIONAL RADIO CONTROLLED MODELS SOCIETY

The annual contest for radio control model boats will be held on August 6 and 7 at the Valley Pool, Bournville, Birmingham. Competition secretary: H. CROUCHER, 27, St. John's Road, Sparkhill, Birmingham, 11.

Y.M. 6m. O.A. AND SOUTH LONDON M.Y.C.

August 19. A class team race (Pre-war v. Post-war). Racing starts 11 a.m.

August 26. M class Gravesend Bowl (open). Racing starts 10.30 a.m.

Secretary (Y.M. 6m. O.A.): N. D. HATFIELD, 132, Westbourne Grove, Westcliff-on-Sea, Essex.

HOVE AND BRIGHTON M.Y.C.

August 5. Model Engineers. Regatta at The Lagoon.

August 12. Hastings M.Y.C. M class.

August 19. The Lagoon Trophy. 36 in. class.

August 26. Challenge Match v. London. M class.

Secretary: F. JENNINGS, Ardingly College, Haywards Heath, Sussex.

POOLE MODEL YACHT AND POWER BOAT CLUB

August 5 and 6. Holland Jones Trophy (open), M class.

August 12. Coronet Points, M class.

August 19. Coronation Cup, 10-Raters.

August 26. M v. 10-R Club.

Club Races—2 p.m. Cup Races 10 a.m.

Secretary: W. E. L. PERRETT, 46, Cranbrook Road, Parkstone, Dorset.

HAMMERSMITH SHIP MODEL SOCIETY

On August 21 a talk will be given on life in the Merchant Navy. This meeting will be held at Westcott Lodge, Lower Mall, London, W.6, at 7.30 p.m.

Secretary: H. J. COSTER, 98, Craven Park, Harlesden, London, N.W.10.

LANCASHIRE AND CHESHIRE S.M. SOCIETY (1955)

This society has now established itself in its own club rooms and members are installing benches, a power saw and lathe, etc. This has meant an increase in subscriptions but it is hoped this will be only a temporary measure. An exhibition is to be held in September in conjunction with the local Society of Arts.

Secretary: C. H. MIDDLETON, 31, Kenyon Lane, Middleton, Manchester.

FORMING A CLUB ON TEES-SIDE

About half a dozen enthusiasts on Tees-side propose to start a ship model and ship lovers' society. Anyone interested should write to P. BARTON, 14, Hardwick Avenue, Middlesbrough, Yorkshire.

FLEETWOOD MODEL YACHT AND POWER BOAT CLUB

August 11. Wood Cup (Jr.), M class.

August 18. Spoon Race, M. class.

August 19. Mather Richardson, M class.

August 26. Power Boat Section.

Secretary: P. L. WINDSOR, 31, Galloway Road, Fleetwood, Lancs.

10-RATER CHAMPIONSHIP AT SCARBOROUGH

The first 10-rater championships staged by the newly-formed North Eastern District Committee of the M.Y.A. was held at Scarborough.

Twelve boats, representing four of the five clubs in the region competed, the wind being very light and south westerly. Four pairs left the starting buoys when the wind veered 180 deg. and became a good working breeze. Then they fouled and the O.O.D. decided to restart the race.

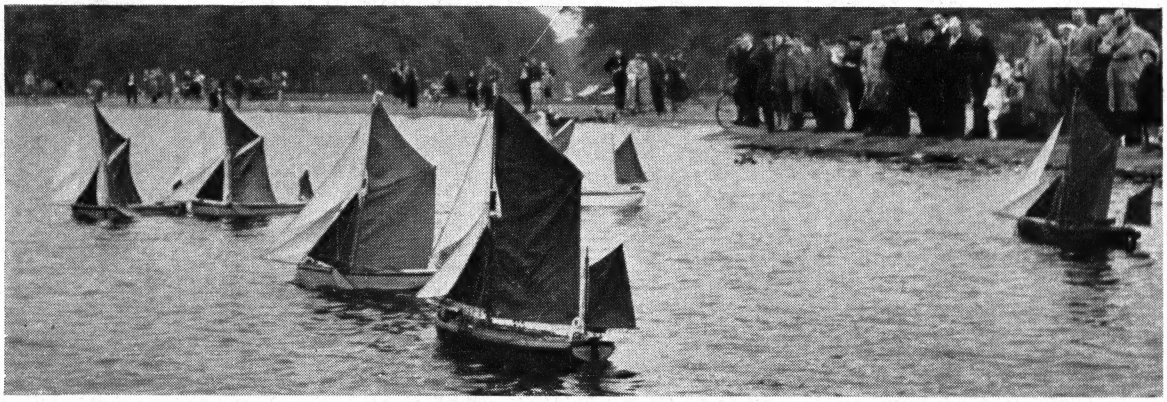
A keen race subsequently developed, the three leading boats being neck and neck until nearly the end of the race.

The acting secretary of the Scarborough club, Mr. Webb, produced the trophy which he had made for presentation to the N.E.D.C. for this event—a beautifully constructed, silver plated model of a modern 10-rater mounted on a block plinth.

An unusual feature was that the first three home were all sister ships built by different builders from a 60 in. LWL design by H. E. Andrews.

RESULTS

Adagio	R. Patterson	Newcastle	41	points
Jacqueline	G. Webb	Scarborough	40	,,
Allegro	W. Crowther	Tynemouth	36	,,
Carolyn	J. Brunt	Scarborough	33	,,
Vega	G. Johnson	Newcastle	30	,,
Elf	G. Hardy	East Hull	29	,,
Bluefinch	E. Hadwin	Newcastle	29	,,
Myna	F. B. Dewhirst	Tynemouth	26	,,
Iris	G. Bolder	Scarborough	26	,,
Osprey	F. Watson	Newcastle	19	,,
Roma	— Goodwin	East Hull	13	,,
Souvenir	C. Hurst	Tynemouth	5	,,



and detail on this model were first rate and, as she also sailed very well, she was placed second in her class.

Curiously enough the third place was awarded to the other topsail schooner *Diana* (W. Hill). This was an attractive model about 30 in. long, with the neat deck fittings and rail made in boxwood. First prize, the Evans Trophy, in this class went to *Cutty Sark* (P. Gould). Rigging was simplified for sailing and her false keel was somewhat overpowering, but she sailed at her correct water-line and behaved well in the water, besides being quite fast. Her fore and main royals and main skysail were furled when the wind strengthened during the afternoon, but in the morning she was a perfect picture careering along with everything set.

The four-masted barque *Star of the South* (A. K. Williams) and the three-mast barquentine *Ocean Queen* (F. Pearson), previous trophy winners, were also present and sailed beautifully. A pondside entry was a lovely little model of the full-rigged ship *Carmarthenshire* (R. C. MacCormac). She was only about two feet long overall and was planked in balsa, but despite her small size she stood up to the squalls remarkably well.

There were some interesting models in the fore-and-aft class, the first position and medal being awarded to the Brixham trawler *Valerian* (D. S. Paterson). She has practically a normal keel and the model as a whole has accurate proportions, rigging and deck details. The fishing gear was well represented. In the picture the main and mizzen sails are reefed down and the gear is a bit untidy as she had just come off the pond.

The three-mast auxiliary schooner *S. A. Elmes*, named after the late secretary of the Greenwich S.M.S., and sailed by J. B. Jenkinson, won second place. This is a beautifully made model and sailed well.

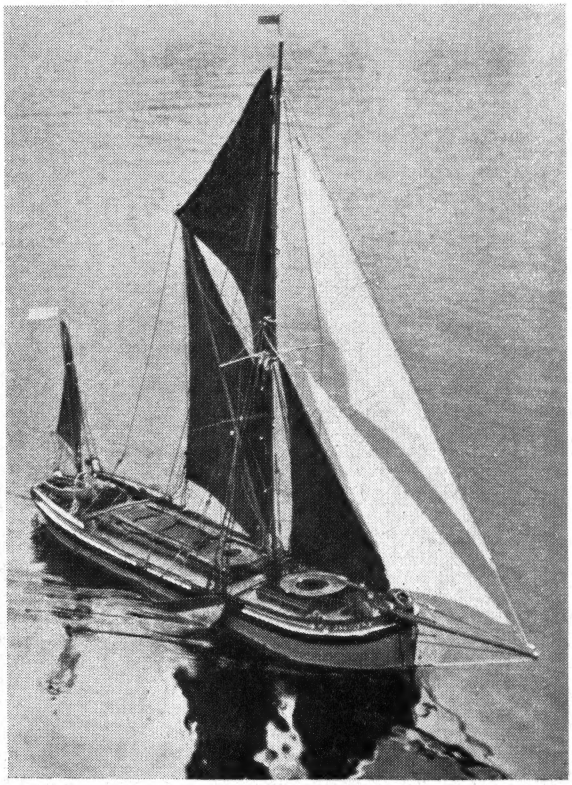
The oldest competitor was 96-year-old E. J. Brooks who won the trophy two years ago. This year he sailed his gaff cutter *Shamrock IV*. She was only 24 in. long and had much fuller lines than her prototype, but although she was more than seventy years old she stood up to the gusts very well and was really fast on a wind.

There were only two entries in the native and experimental ships class, these being a $\frac{1}{4}$ in. scale Borneo cattle boat by C. V. Thompson and a 20 in. model of a Cochin China *Gay-Bao* of 1867 by W. Gay. Both sailed well and a diploma was awarded to *Gay Bao*.

The rally commodore was C. MacDonald Mein, commodore of the Thames Barge Sailing Club. Trophies, medals and diplomas were presented in the M.Y.S.A. Clubhouse.

J. J. Starkey's fine model barge "Janice"

Mr. Foreman's model barque contains a lot of interesting detail



ATOMIC POWER SNAG

SIR,—It seems that atomic-powered submarines will be standard in the world's navies fairly soon, but what happens to the crew of a badly damaged A-boat ?

If a near hit by a depth charge damaged the pile, would the crew be affected by radiation to any severe extent ? If this is the case, the life of a submariner in wartime will be appallingly hazardous.

Harlow, Essex. S. CLEMENTS.

AUTHORS' HOWLER

SIR,—How many other SHIPS AND SHIP MODELS readers have noticed how often authors of otherwise excellent books make the frightening mistake of quoting a ship's speed in " knots per hour " ? An elementary blunder like this spoils a book for me, because it is so obvious that the author does not know his subject.

The most outstanding author for complete correctness to my mind is the incomparable C. S. Forester, who, to the best of my knowledge, has never tripped up in his stories—whether he is dealing with the Napoleonic era or the last war.

London, E.18. W. EVANS.

THINKING ALOUD

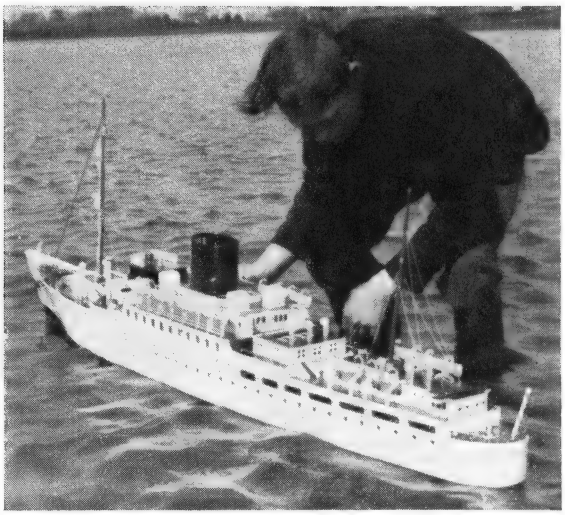
SIR,—First let me express my thanks for such a first class magazine as SHIPS and SHIP MODELS, I eagerly await each month's issue. I have been a regular reader for some three years, having my copies bound each year.

I note in Mailboat that several readers have commented on the lack of that most interesting feature, Fleet Reviews by Laurence Dunn.

May I add my little piece ? I for one miss this very much and eagerly look forward to it being a regular feature—it helps those interested in shipping apart from the model makers, very much. I, for one, would like to see more space devoted to shipping as a whole and less to model making. I am not a model maker myself, but hope to become one with the aid of your most excellent series recently started for beginners to ship modelling.

Do keep up the very high standard of your magazine and please do not dwell too much with shipping or the past. Interesting as these old ships were in their day, we are a modern generation and some of us are not all that interested in ships of the 1914 era.

Brighton, Sussex. H. T. SHERRIFF.



W. E. Barnes seen here with one of his collection

QUEEN MARY

SIR,—I am a keen reader of SHIPS AND SHIP MODELS and I thought that you may be interested in some photographs recently taken of my model of *Queen Mary*.

This particular model has taken me three years to complete, is 5 ft. overall, driven by twin screws and is radio controlled. The model has been built entirely by me. The blueprints and dock drawings were supplied by Bassett-Lowke.

In conclusion, I think that your magazine is first class, and I am now in the process of drawing up a design for the coastal tanker *Shell Welder* shown last August.

Reigate, Surrey. W. BREWER.

● *We are always pleased to hear of readers using information from the pages of* SHIPS AND SHIP MODELS. *Perhaps Reader Brewer will send us a picture of the completed model.*

READER'S SHIPYARD

SIR,—I have just had sent to me a copy of SHIPS AND SHIP MODELS.

I am enclosing some pictures of different model ships, from my " shipyard." I build one a year, and I have a good deal of information and pictures of ships models.

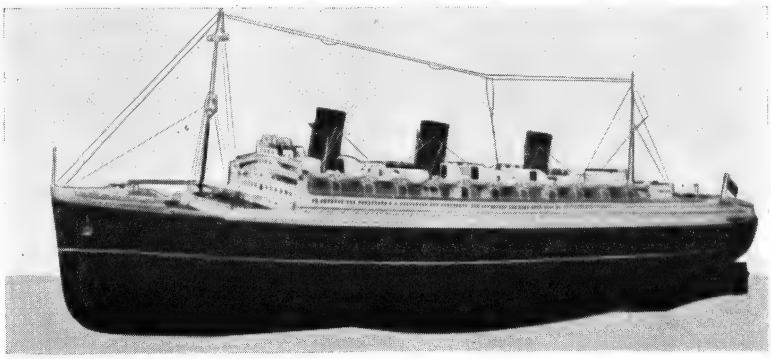
Wilmslow, Cheshire. W. E. BARNES.

H.M.S. LION

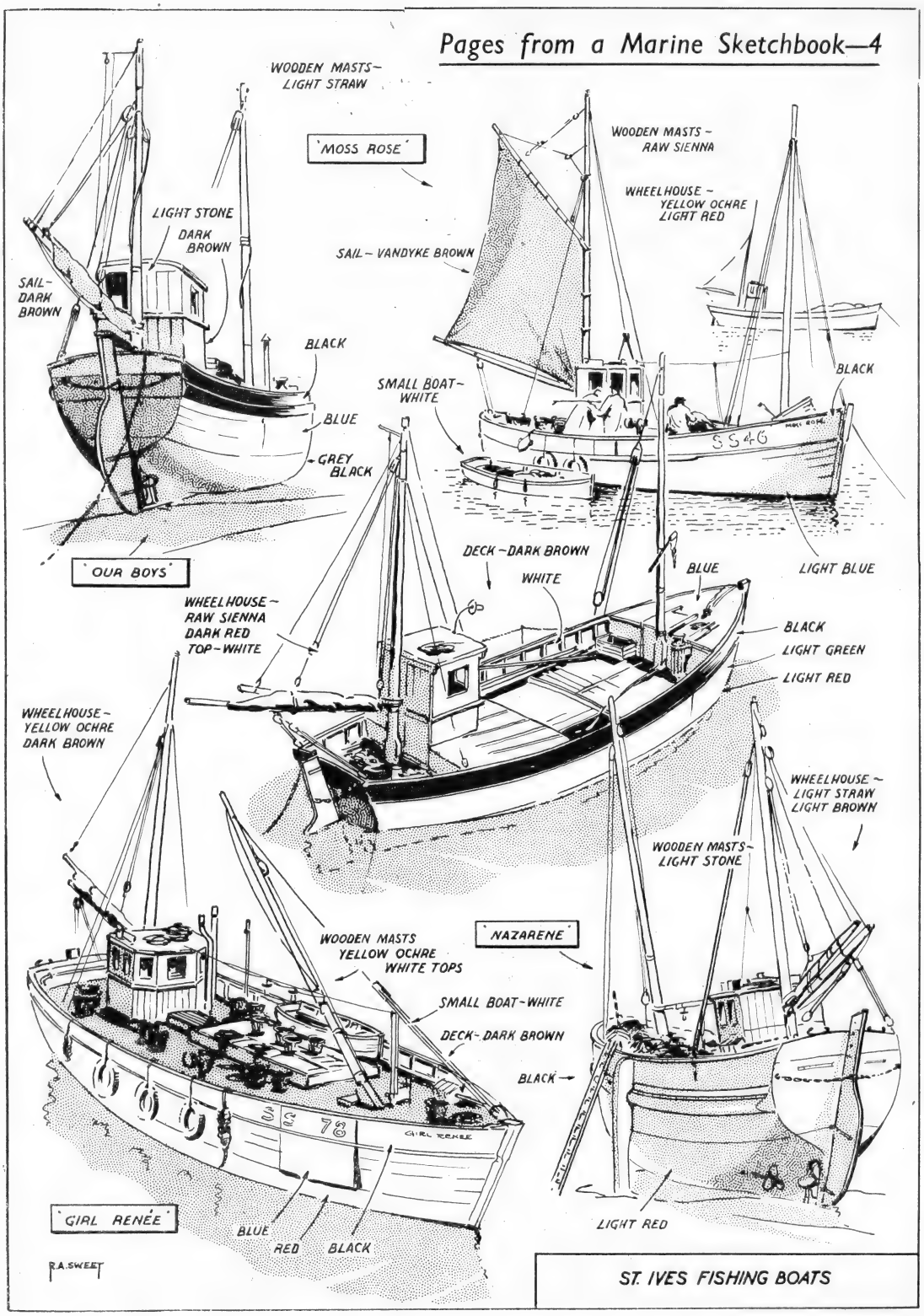
SIR,—Referring to the correspondence on H.M.S. *Lion*, I am wondering whether many readers know that, when first built, she appeared rather differently to that generally depicted in photographs.

When she first came out she had a tripod mast aft of the fore funnel and all the funnels were rather low in height. During her trials it was found that the control of the foremast was burnt out by the gases from the fore funnel so she had to be taken in hand for a certain amount of rebuilding. All the funnels were heightened, the fore funnel was moved further aft and a pole foremast was placed before the fore funnel.

Hall Green, Birmingham. R. C. STALLARD.



An impressive model by W. Brewer of R.M.S. " Queen Mary "


Pages from a Marine Sketchbook—4
WOODEN MASTS~ LIGHT STRAW
'MOSS ROSE'
WOODEN MASTS ~ RAW SIENNA
WHEELHOUSE ~ YELLOW OCHRE LIGHT RED
LIGHT STONE
DARK BROWN
SAIL~ VANDYKE BROWN
SAIL~ DARK BROWN
BLACK
SMALL BOAT~ WHITE
BLUE
GREY BLACK
SS46
'OUR BOYS'
DECK~DARK BROWN
WHITE
BLUE
LIGHT BLUE
WHEELHOUSE~ RAW SIENNA DARK RED TOP~WHITE
BLACK
LIGHT GREEN
LIGHT RED
WHEELHOUSE~ YELLOW OCHRE DARK BROWN
WHEELHOUSE ~ LIGHT STRAW LIGHT BROWN
WOODEN MASTS~ LIGHT STONE
'NAZARENE'
WOODEN MASTS YELLOW OCHRE WHITE TOPS
SMALL BOAT~WHITE
DECK~DARK BROWN
BLACK
SG 78
GIRL RENEE
'GIRL RENEE'
BLUE
RED
BLACK
LIGHT RED
R.A.SWEET
ST. IVES FISHING BOATS

BUILDING AN EARLY

SIXTH RATE

by R. J. COLLINS

Further constructional details of this fine vessel are given by R. J. COLLINS. This month he deals with the foremast rigging

We start with the standing rigging. Step the bowsprit and attach the gammoning, Fig. 74. This is the rope which holds the bowsprit down. Take a length of 5 in. and make a small eye splice in one end. Pass this over the bowsprit from starboard to port and back beneath to starboard.

Holding it there, pass the running end through the eye and straight down through the beakhead timbers to the forward end of the gammoning hole: now up the port side, over the bowsprit ahead of the rope already there and down the starboard side through the hole aft of the rope already there.

Continue for seven or eight turns and finish off with a number of half hitches around the waist of the gammoning. It is advisable to put a spot of glue on the hitches when you have finished.

The foremast rigging

Step the foremast and prepare the first rigging line, which is the relieving tackle, Fig. 75. For a ship of this size it consists of only one pendant, but as there is an uneven number of shrouds we can get over the difficulty by pairing it up.

For the sake of the record, I must say that Battine gives this as a 4 in. rope to the shrouds' $3\frac{1}{2}$ in. Make a loop in the rope by means of a seizing and place it tightly over the masthead to come down on the starboard side. The forward end of the rope will be a shroud, so it should be long enough to take the deadeye. The after end will be the pendant and should be stropped to a 15 in. single block about one-third of the way down.

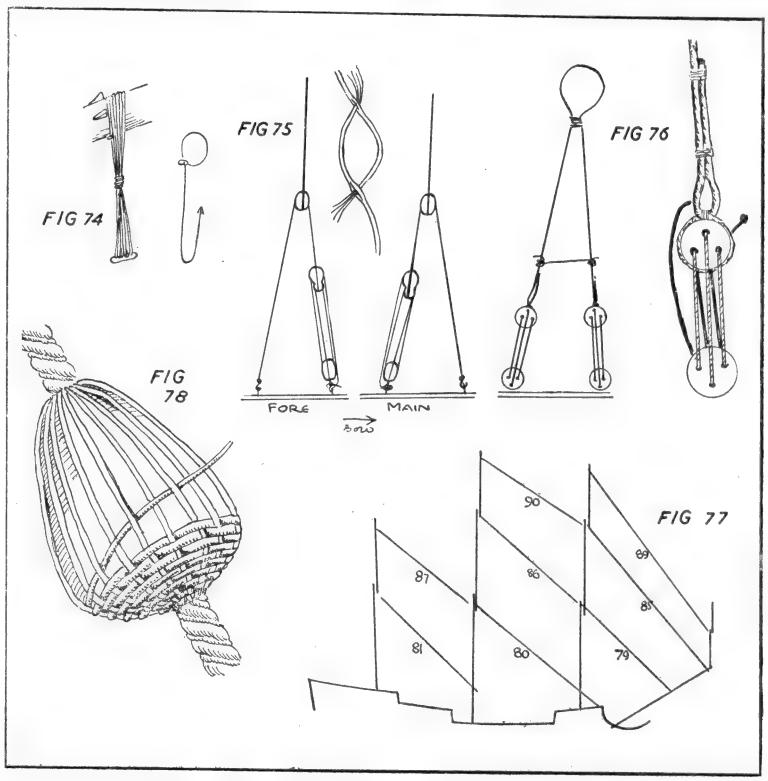
Through this block is rove the runner which is also the same size as the pendant. One end of the runner has a hook which is engaged in the forward eyebolt on the channel (between and behind the first and second deadeyes) and to the other end, about 6 ft. from the pendant block is stropped a 22 in. long tackle.

The falls consist of a length of 2 in. rope to which is stropped a 14 in. single block. The runner leads from the bottom of the block, and at the head of the block is a hook. Engage this hook in the second eyebolt (behind the third and fourth deadeye) on the channel, reeve the runner through the lower part of the long tackle and back to the 14 in., taking it through the upper part of the long tackle and down to make off below the bottom block. Do the same on the port side and pull the mast upright and true.

From the rigging point of view the tackle of the main mast is very similar. From the modelling point of view it is different. There is an even number of shrouds here so the single pendant must be paired up with the one on the other side. This is best done by using a cut splice. I have drawn what I mean as I find it easier to explain that way. Don't make the loop too big and be sure your whipping is really tight.

The pendant is $4\frac{1}{2}$ in., pendant block 16 in., fall 4 in. with 24 in. long tackle, and the runners are 2 in. with 16 in. block.

The fall is engaged in the bolt at the after end of the channel between the fourth and fifth deadeye. The forward eyebolt for the tackle is between the first and second deadeye. Proceed with the one on the other side. You will note that the whole



Ships and Ship Models Mailboat

● **Letters of general interest on maritime matters are welcomed. A nom-de-plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents**

SIR,—I feel that I cannot let the letter from J. C. Knox (Mailboat, June) pass without comment. Mr. Knox complains of feeling depressed by what he calls the constant harking back to the past, and asks why we must revere sail and adulate steam.

Being a sail enthusiast (which Mr. Knox obviously is not), I feel only pity and sympathy for him and I am sure the many steam enthusiasts must feel the same. Model makers in general usually feel the urge to reproduce that which they see and admire. I happen to be one of those who have, since boyhood, been deeply moved by the sight of sailing craft (both ancient and modern), and now that the last few survivors are rapidly disappearing, I feel it is almost a duty to at least attempt to perpetuate their memory in the form of models.

At the same time, I am glad to say I can also see beauty in the modern ocean-going vessels. Consequently, turning the pages of SHIPS AND SHIP MODELS each month is something to look forward to.

If Mr. Knox finds the magazine depressing, then I am sure he would find some of the science fiction magazines more to his taste, catering as they do for those who have little interest or patience in the world as it is at present.

Dagenham, Essex. S. H. MURDOCK.

CARISSIMA INFORMATION

SIR,—In reply to E.I.P.'s query (June issue) regarding the fate of the yacht *Carissima* and *Lone Star*, the following details and photograph of *Virginia*, although slightly larger than the above-mentioned yachts and still bearing her original name, may be of interest.

Virginia was built in 1930 by William Beardmore and Co. Ltd., Dalmuir. Her dimensions are: length 209 ft. (o.a.), 173 ft. (w.l.), breadth 29.6 ft. and draught 13.2 ft. Her tonnage is 692.27 gross, 341.6 reg. net and 742 Thames Measurement.

Her present owners are the Trustees of the Estate of the late Viscount Camrose.

Torquay, Devon. GODFREY H. WALKER.

FALKENSTEIN COLOURING

SIR,—In answer to Mr. Winterton's query on the hull of m.v. *Falkenstein*, I have been able to obtain the following information which I hope will be of use. I would, however, like to point out two errors. First, the article appeared in SHIPS and SHIP MODELS of January, 1955, not 1954, and secondly, *Falkenstein* was under charter to the South African Lines not Safmarine—two entirely different concerns.

The design on the hull had five bars—orange, blue, orange, blue, orange—the reason being that the very squat design of the funnel would not allow seven bars to be painted on.

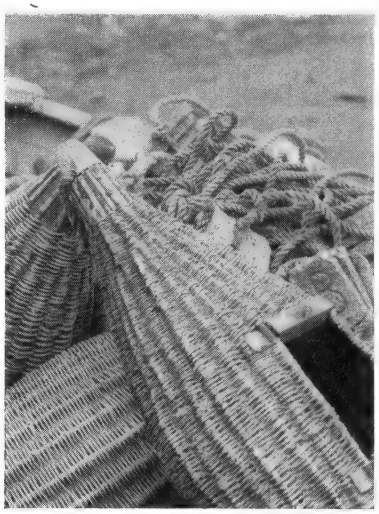
Cape Town, S.A. T. W. ADAMS.

SHIPS v. H BOMBS

SIR,—I fail to understand the wearisome and protracted tests to prove that hydrogen bombs can sink capital ships when it was proved conclusively in the last war (Pearl Harbour, *Prince of Wales* and *Renown* are outstanding cases) that ordinary bombs can sink a battleship with the greatest of ease.

Indeed, well before the war Billy Mitchell frightened U.S. Navy chiefs out of their wits when he sank capital ships with relatively small bombs. The only possible reason I can think of is the study of close-range blast and fall-out, but why destroy all these fine ships when the same results could be achieved with fewer craft?

Selly Oak, Birmingham. V. CARTER.



SIR,—Some of the readers of Arthur Bradbury's article on the Guernsey and Sark fishing fleet may be interested in seeing this photograph of the Cougne or eel basket which he describes. This picture was taken on Sark in 1939.

University of Liverpool. D. CHAPMAN.

FLEET REVIEWS

SIR,—May I add my disappointment to that expressed by Jeffrey Curtis at the omission of the feature "Fleet Reviews" from your magazine.

I, too, am unfortunately not possessed of the skill or time to build ship models, but I am interested in everything about ships and look forward each month to my copy of SHIPS AND SHIP MODELS.

"Fleet Reviews" feature was a particular favourite of mine and I hope you have enough reader response to reinstate it.

Washington, U.S.A. JACK R. RABELL.

Left: A fine picture of "Virginia"

tackle is in reverse to that on the foremast. For a while leave the ends of the runners rather long in case they need adjusting later. There are no tackles to the mizen.

The shrouds, Fig. 76, are put on in pairs, starboard first and then port. The first foremast shroud is already on. The rest of the shrouds are put on in a similar manner as the fore tackle pendant, that is by forming a loop and slipping it over the masthead. The deadeyes are turned in at the bottom of the shrouds in a special manner.

Cable or shroud laid

Looking from outboard, if the shroud is cable or shroud laid the rope passes down the right-hand side of the deadeye, up the left side and behind the standing part (it is throat seized at this point), up the right-hand side of the standing part and seized. This end should be made about as long as the diameter of three deadeyes with a flat seizing in the middle and another close to the end.

If the shroud is hawser laid then the directions are reversed. The deadeyes are laced together with a lanyard between two-and-a-half and three diameters apart. One end of the lanyard has a knot which prevents it from pulling through the deadeye.

Dr. Anderson says this should be a " Matthew Walker Knot," he also says that for modelmakers an ordinary figure-of-eight will do as well, and how thankfully do I echo his sentiments !

The lanyard is threaded from inside out, starting at the bottom right-hand hole of the top deadeye, down to its opposite number and so on, and it is finally made off with a clove hitch around the throat seizing. The sizes of shrouds are: fore 3½ in., lanyards 2 in.; main 4 in., lanyards 2½ in.; mizen 2 in., lanyards 1 in.

Use a guide

The ratlines are 1 in. and are fastened to the shrouds with clove hitches, each line being 15 in. apart. I find it best to put a marked card behind the shrouds; this serves as a guide and rests the eyes by blocking out the background.

It is convenient to have the model, or the part being rattled down, at elbow level. There is a tendency to pull the shrouds in so I put on about every fifth or sixth ratline to serve as guides. Pull the knots tight and seal them with some form of glue or gum and don't be too eager to trim the ends. This is a tedious job but don't leave it too long or the other rigging will get in the way.

After the lower shrouds, the stays. The sketch shows the whole lot,

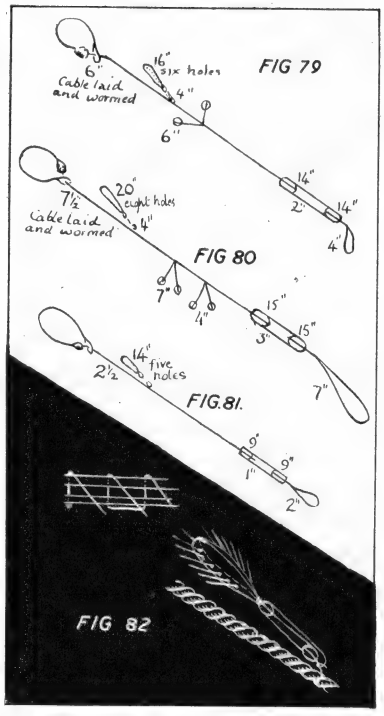


Fig. 77, and individual figures show the furnishing, as it is more convenient to put the blocks on as soon as the stay is in position than to wait until later.

To make, form a small eye splice at one end and use this to build a larger loop. This loop is controlled by a stopper or " mouse," Fig. 78, which if made properly is a work of art in itself. As I have shown, it is woven basket fashion over a central core. For larger models this core can be made from a strip of insulating tape but I have had some success with a specially turned wooden bead glued into position *after* covering.

The mizen topmast stay and the two topgallant stays are not moused but are made from large eye splices. The lower ends of the stays are stropped to deadeyes in exactly the same manner as the shrouds. The lower deadeye of each pair is held by a collar.

For the foremast this is stropped tightly around the bowsprit while for the main stay the collar passes through the hole in the knee of the stem, through (or above) the beakhead rails to its deadeye just inside. It is laced to the main stay on the starboard side of the mast. The mizen stay is secured by deadeyes to the mainmast, the collar of the lower deadeye being prevented from slipping up by a wooden stopper just below the second band of woolding. Sizes: fore 6 in., collar 4 in., lanyards 2 in., deadeyes 14 in., Fig. 79; main 7½ in., collar 7 in., lanyards 3 in., deadeyes 15 in., Fig. 80; mizen 2½ in., collar 2 in., lanyards 1 in., deadeyes 9 in., Fig. 81. The fore and main stays are wormed.

The crowsfooting

There is a part of the standing rigging attached to the stays known as the crowsfooting, Fig. 82, and the purpose of this is to prevent the topsail from catching beneath the tops.

A euphroe block (that is a long piece of wood with holes in it) is connected to the stays by means of a three-part tackle. Thin lines run from the euphroe to the forward edge of the top. It is best fitted by making fast to the stay first and then tying off the central line to the centre of the top. Get this snug but be careful not to pull the stay up.

I know you haven't put the holes in the tops yet because I have only just mentioned them. But the tops should not be on so there is no damage done. There is a rib exactly in the centre of the top so the " central " hole will have to be close to the side of this. The end holes should be about two-thirds or a little more back to the middle ribs. Drill the required number of holes as evenly spaced as possible between these points.

While you still have the tops off you can put on the top deadeyes (I know I should have described all this when I was dealing with the tops). Strop the deadeyes as you did the lower ones and pass the bottom of the strop through holes drilled in the floor, near the edge, of the tops. The first hole should be just in front of the middle ribs aft.

Sewing-needle drill

For the mizen top, the first deadeye is in front of the middle rib and the other one in front of the next rib aft. Make the holes for the crowsfooting as small as possible. I make my own drills for this type of job. Fix an ordinary sewing needle in a pin chuck and with a small sharpening stone rub the needle down to a three-corner section, thus actually transforming it into a reamer. You will find this ideal for drilling wood. In putting the tops on make sure they are well fastened down on the trees. They should be glued but don't trust to this alone. One way of additional security is to make use of the hanging blocks. The strops of these should come through the floor of the top and be held by a toggle. Drill the holes for these through the cross trees as well as the top, strop the blocks with wire (I should do this in any case) and draw them as tight as possible.

A couple of pins passing down

SHERLOCK at sea . . . .

" . . . an ancestor went on an early polar expedition"

ALEC A. PURVES describes how to track down and record obscure information on maritime matters

NAUTICAL RESEARCH is a subject that brings its own rewards. The enthusiast need not necessarily be a modeller or even interested in maritime subjects as such.

There are two distinct but allied aspects—one, the recording of existing information and second, the search for undiscovered or forgotten information. The beginner cannot expect to make much headway in the second without some experience, but he can start on the first which may well lead to the second.

There is so much material in danger of disappearing daily that it is sometimes difficult to recognise what needs to be recorded. The fact that some decayed hulk is passed every day makes it commonplace, and it is only when a storm breaks it up and the local paper reports that the last link with the Norfolk slave trade has disappeared (if such a trade even ever existed), that one suddenly wonders why this precious relic was never photographed, measured, and recorded, while it was still there.

Discovering the flags

An example of recording data occurred a few years ago, when I was engaged on some research into customs and excise flags. I was working on documents in the customs library, when the librarian remembered he had a number of old customs flags locked away in a trunk. I was able to examine and measure them all and obtained a lot of information concerning mid-nineteenth century flags. It was not true research, perhaps, as their existence was known but it was valuable data re-discovered.

The beginner can start work on similar lines by carrying a notebook and measuring tape. In fact a suitable outfit would be a haversack containing a camera, telescopic tripod, notebook, 2-ft. rule, tape measure, 20 ft. of string, a few coloured pencils or pens, and such other items as subsequent experience shows to be necessary.

He can haunt odd corners and record anything that looks old-fashioned enough to be in danger of becoming obsolete: perhaps a lobster pot of different design from the usual type, perhaps a discarded windlass or an old boat. Further details can probably be obtained from local worthies, but do not accept their stories without verification.

Research procedure is the same whatever the subject, but exact details, sources of information, method of search, and range of knowledge required will vary.

For certain subjects, a knowledge of foreign languages, including Latin and Greek, is most useful and may be essential—you cannot expect to get far with Dutch boeiers, Venetian galleys, naval tactics, or even Spanish galleons, unless you can read the relative foreign documents. Similarly a knowledge of Latin and ability to transcribe and understand old English is essential for a study of our early and medieval craft.

Do it yourself

There is, however, an untold wealth of information in plain English, about our own ports and craft, large and small, from the seventeenth century up to modern times waiting to be gleaned, collated, and published.

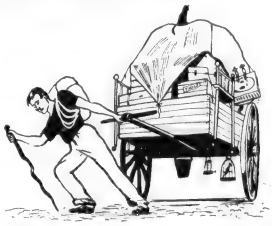
Let us assume that you have decided to practise on the Norfolk wherry—a vanishing type about which much, but not all, has been written. Here in Norfolk you can still see one or two, you can photograph the *Albion* under sail and you can obtain permission to sketch, photograph, and measure her deck fittings, rig, hull, etc. Other powered or moored wherries exist—converted, but still retaining many of their original parts. Read up all the books, magazines, newspapers and other documents concerning wherries. You may have to refer to files 50 years old, but the local librarian will help. Compile lists of known wherries, with their dates, their owners, and their ultimate fate.

Much of your data can be checked, but sooner or later you will get stuck on a point of detail. Then comes the time to enter the correspondence columns of the local Press, and usually you will not go unrewarded. Whatever your subject the appropriate local Press is often more productive than one might expect. Perhaps you want to know something about a certain Devon schooner and have drawn blank in Devonshire. If you know that she was a regular visitor at Aberystwyth or Liverpool in the 1890s, then a letter to the respective local papers may catch the eye of someone who knew her.

Papers circulating in districts where ships were built, where they traded, or where they were wrecked or laid up, together with shipping trade journals, provide a good source for enquiry.

Touch of the expert

After a few years of this type of work, you will begin to find yourself becoming something of an expert, and and will have to decide whether to strike out afresh or to continue with your practice subject. During these years other trails will have crossed your path, and you will probably have discovered new subjects which are really in need of research.



" . . . other items . . . experience shows to be necessary"

Perhaps it is disused inland waterways, some obsolete type of sailing boat, anchors, or the development of the trawl, the winch, the rudder, or the bob. Whatever the subject, district, or period, choose something practicable.

Perhaps in a local stained glass window or art collection is a representation of an old ship sailed by a local worthy centuries ago; perhaps one of your ancestors served in an eighteenth century bomb-ketch (or went on an early polar expedition); you may develop an interest (as I have done) in maritime flags and signals, or in early maps and charts. There are so many subjects to choose from, each offering a wide scope, each starting with a study of existing specimens or literature, developed by search and research, that you only have to select something that really interests you and you will find a lifetime's study waiting to be tackled.

through the top and the trees, the bottom part twisted to an eyebolt, will also help to hold and will look like parts of the normal fittings. I have noticed some of these " unoccupied " eyebolts in a contemporary model and I suspect that that is the reason of their being there.

" Unoccupied " eyebolts

To come back to the crowsfooting. Put a knot on the end of a 1 in. line, thread the running end up through the after starboard hole of the top, down through the farthest hole of euphroe and back down through the after porthole of the top, up through the next hole, down to the euphroe and so on, finishing off next to the central line. Fore euphroe: 16 in., 6 holes; main 20 in. 8 holes ; mizen 14 in., 5 holes.

The catharpins, Fig. 83, and futtock shrouds, Fig. 84, had best be considered together. Across the shrouds, as far down from the top as the cap is above it, place a bar. This is the futtock staff and should be as thick or a little thicker than the shrouds. I have found it best to use a piece of wire.

Lightly glue it into position; don't worry, it won't have to stay glued. These bars, one either side, will be joined by the catharpins. To make these strop a small single block to an equally small deadeye. You will need two for the mainmast so make all four while you are about it.

Reeve the two blocks together in a three-part tackle. Lay these by your side for a moment. From a length of rope similar to the topmast shrouds (fore 2 in., main 2½ in.) cut for each mast six pieces about twice the length of the respective mastheads. On to one end of each of these secure a small hook.

Engage this hook in the strop of the top deadeye and bring the rope down and with a twist embrace both the appropriate shroud and the futtock stave, naturally the two outside ropes to the outside shrouds and the central one to the central shroud. With one or two seizings secure the end of the futtock shroud to the lower shroud. This end should reach down two ratlines.

In doing this, while keeping everything as taut as possible, be careful not to pull the shrouds out of true. Now back to the catharpins.

Attach the standing end of a fine lanyard to the futtock stave and after shroud. Take it through the bottom left-hand hole of the deadeye and back to the stave and second shroud, turn around the bar and third (central) shroud and out to the deadeye's central hole. Take it now back around the third shroud again and across to the fourth shroud, out to the bottom right-hand hole of the deadeye and back and finish off on the foremost shroud. Do the same on the other side.

Fixing the catharpin

Keep the legs the same length and the catharpin can be pulled snug by means of the tackle. Again be careful not to put a kink in the shrouds. The main catharpins are fixed the same way but as there are six shrouds there is no need to run two legs to the middle one. There are futtock shrouds (1½ in.) but no catharpins on the mizen mast. Don't forget that the futtock shrouds also have ratlines.

Step the topmasts. They will be held in position by means of the mast caps (there is no need to glue them down, so don't) and the fid which stops them from sliding down between the trees. (I think I have already suggested that this fid be made of metal.)

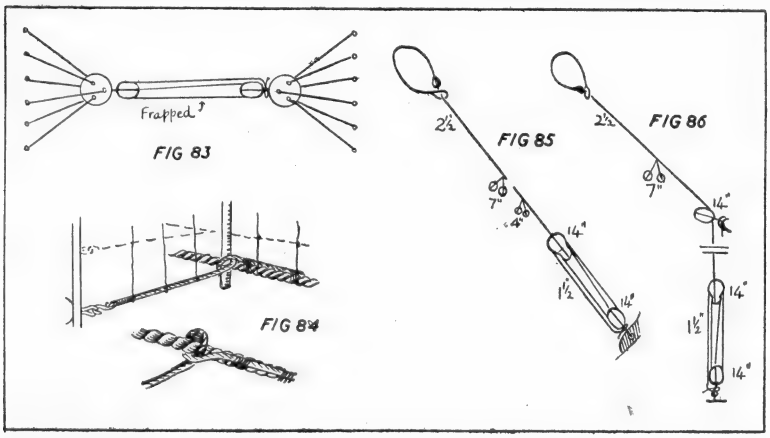
For a Sixth Rate there are no Burton tackles for the topmasts so we get straight ahead with the shrouds. There are three aside, so for the foremast we pair up the last one with the backstay. This stay comes down to a pair of deadeyes, the same size as those for the topmast shrouds. The lower one is fastened direct to the hull a little above and abaft the fore channels. The mainmast has also three shrouds aside but there are two backstays so there is no advantage in pairing them off.

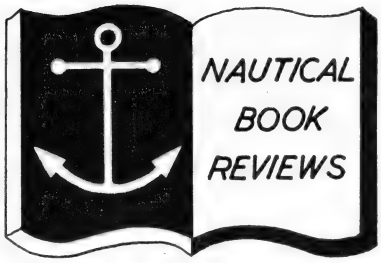
Last shroud

I should treat the last shroud as you did the tackle for the lower mast, that is splice the two together in a cut splice. The deadeyes for these two backstays are also directly on the hull and are slightly above and abaft the main channels. Make them about two feet apart. Mizen topmast shrouds number only two aside and as there is no backstay, there is also no difficulty. Sizes: fore, 2 in., lanyard 1½ in.; main 2½ in., lanyard 1½ in.; mizen 1½ in., lanyard ¾ in. Ratlines are 1 in. for the lot. Go up only one-third of the way on the mizen.

The fore- and main-top stays are secured around the masthead in the same manner as the lower, that is by loop and mouse. The mizen is simply spliced. The fore topmast stay, Fig. 85, is 2½ in. and leads to a 14 in. long tackle. This a rove to a 14 in. single (stropped to a hole in the knee of the spritsail topmast) by a 1½ in. rope and made off below the block.

The main topmast stay, Fig. 86, is also of 2½ in. rope and passes through a 14 in. single block stropped to the back of the forestay, runs down through a hole in the foretop and ends about half way down in a 14 in. long tackle. As in the foretop stay this is connected by means of a 1½ in. rope to a 14 in. single block hooked to an eyebolt in the deck just abaft the foremast.





SAILING EAGLE. The story of the Coast Guard's square-rigger by Alan Villiers, published by Charles Scribner's Sons, New York. London address: 23, Bedford Square, W.C.1. 192 pp. 9¼ in. × 6½ in. Available in Britain, price 21s.

On returning from the United States some time ago the author was given the opportunity of sailing on board the U.S. Coast Guard ship *Eagle*. This book is the result. It is interesting to have Commander Villiers's reflections on his trip, for there are few people in the world with his experience of squareriggers at sea, and still fewer with his ability to relate them.

The U.S. Coast Guard has an interesting history. It is the oldest armed service in the U.S.A. and was brought into being in 1790 by George Washington as the U.S. Revenue Marine. It started with ten small schooners. Now it has a mighty fleet of vessels, varying from ocean-going cutters 327 ft. long to small craft and one big squarerigger.

The U.S. Coast Guard has always believed in sail training for its officers. Therefore when, after the war, the modern German training ship *Horst Vessel* was handed over to the United States the Coast Guards were glad of it, as their previous ship *Hamilton* had worn out in 1930, and sail training had to be given in small craft. The ship was renamed *Eagle*.

It took a few years to train officers and build up a proper system for the big ship . . . now 500 cadets go to sea each year. The ship is fitted with every modern device and, having been designed as a school ship, the boys live under ideal conditions.

Alan Villiers gives an enjoyable account of his experiences and was favourably impressed with the methods of training.

He paints a delightful picture of the ship as she left for the Atlantic crossing: " . . . outside she began to lift and curtsy to the long sea, dipping and bowing gracefully as only the sailing ship can. The wind was on the side and she lay over, not rolling as a steamer would, but dancing along as if she was grateful for the chance to be sailing again."

The book contains over 200 pictures (by the author), many of them full page and all showing details of the greatest value to the ship modeller. Some were taken from the big cutter *Rockway* which accompanied the ship and give magnificent pictures of *Eagle* under sail.

TRAWLER DESIGN

FAO Fisheries Bulletin Vol. VIII, No. 4, Oct.-Dec. 1955. Published by the Food and Agriculture Organisation of the United Nations, Rome. Obtainable from H.M. Stationery Office, London.

This issue has a particular interest for the builder of working ship models, in that its principal article is on " Fisheries and Naval Architecture." This article discusses very thoroughly the design of trawlers, the type of ship which probably has the greatest appeal as a working ship model. The treatment of the subject is not too technical, and a careful study of the article would well repay the serious modeller.

READERS' QUERIES

Salt-water corrosion

Q Next month I will be moving to a seaside town that has a strong ship modelling club. Their pond is filled with salt water. Should I take any special precautions with my " fresh-water " yacht or is waterproof-paint resistant to fresh and salt water ?—P.N., Stroud, Glos.

A The paint used on most yachts is perfectly suitable for either fresh or salt water and no special precautions are necessary. However, care should be taken in drying off the boat after sailing, especially with metal fittings and parts such as those of the vane gear.

Information wanted

Q I would be glad if any reader could help me trace any drawings or lines of the sailing ship *Aristomene*, built in 1881 at Liverpool. It is my intention to make a model of this ship, but unfortunately I have not been able to trace any drawings.—A.W.C., Stourbridge, Worcs.

A Aristomene *was an iron ship built by W. H. Potter and Sons in* 1881 *for H. Fernie and Sons of Liverpool. Her dimensions were* 263 *ft. long*, 39.1 *ft. beam and* 24.1 *ft. depth. Her poop was* 37 *ft. long and fo'c'sle* 22 *ft. She had two decks and her registered tonnage was* 1,750.

Displacement of ships

Q Can you settle an argument for me please? When the weight of a ship is quoted, does it mean the weight of water displaced or the true weight of the ship ? Or does this amount to the same thing ?—L.H., Hornsey, London.

A The tonnage of a ship usually refers to registered tonnage, as it is this on which the ship pays dock and other dues. Registered tonnage is the gross tonnage less deductions on account of crew space and engine space. The gross tonnage is the entire cubic capacity of the ship taking in deck-houses and erections of all kinds measured in tons of 100 *cu. ft. The deadweight tonnage is the ship's carrying capacity—the actual weight in tons which she will carry of dead-weight cargo such as coal (including bunker coals), iron ore and oil, etc. The displacement tonnage is the total weight in tons of the ship and everything on board as she floats at any particular time or state of loading. This figure is equal to the weight of water displaced.*

Beginner's dilemma

Q I bought my first copy of SHIPS AND SHIP MODELS last month and I was particularly pleased with the new series for beginners. My main interest, however, lies more with non-sailing models and I should like some information on this branch of the hobby. How would you suggest an out-and-out novice starts ?—R.W., Luton, Beds.

A Small waterline models of a number of liners or warships are good starting subjects. The hull form can be obtained from photographs or scale drawings. The superstructure can be shaped as solid wooden blocks and glued and pinned on. Funnels can be made of wood and needles or pins may be used for the masts and pieces of wire for the guns. The scale should not be larger than 100 *ft.* = 1 *in. as, at this scale, a realistic effect can be obtained without rails or rigging and similar small details. The models should all be to the same scale, irrespective of the size of the ship. In this way the comparisons between them become more interesting as new units are added to the fleet. One's techinique improves with every model and before long larger models may be attempted.*

The development of the davit. Methods of handling lifeboats, from the block and tackle of history to the electrical gear of today are discussed here

SCRAPBOOK

In the gravity davit the boat is carried in a sort of cradle mounted on inclined slides, the slides being curved at their lower ends so that the cradle partly turns over when it reaches the side of the ship, thus enabling the boat to swing free and in a suitable position for lowering into the sea. There are, of course, many variations of these two basic types, but once the essential difference is appreciated they can be classified quite easily.

Dealing first with the luffing type davit, the most popular in this class is the quadrant davit. In this the arms are provided with a toothed quadrant at their lower or inboard ends and are pivoted at the centre of the arc of the quadrant.

This pivot point is anchored in a sliding block which can be moved along a horizontal bar by means of a screw. The teeth of the quadrant engage with recesses in the rectangular frame which carries the screw and, as the pivot block is wound along by means of the screw the arms are raised or lowered as the case may be.

When the arms are swung outboard the boat is raised or lowered by the usual tackles, either by hand or by winch according to the size of the boat ; when the arms are swung inboard the boat can be lowered on to the chocks provided, the outboard half of the chocks being raised by means of a shaft and lever to hold the boat securely. In this type the arms are spaced clear of the ends of the boat and the outer ends are curved toward one another to suit the spacing of the lifting hooks by which the boat is suspended.

A variation of the quadrant davit is used where the boats are placed close to each other, end to end, and there is insufficient space between them for the normal mechanism. The arms are located within the length of the boat and must therefore be shaped so as to curve around the boat. It will be noticed that the example shown has wire rope falls and is controlled by an electric winch.

The crescent davit is also of the luffing type and is used for boats spaced end to end or with the davits positioned within the length of the boat. The arm is pivoted at its lower end to the deck frame and is swung outboard by means of the screw-operated telescopic link, which also is anchored to the deck frame. Variations of this type are frequently met with in destroyers and other naval vessels.

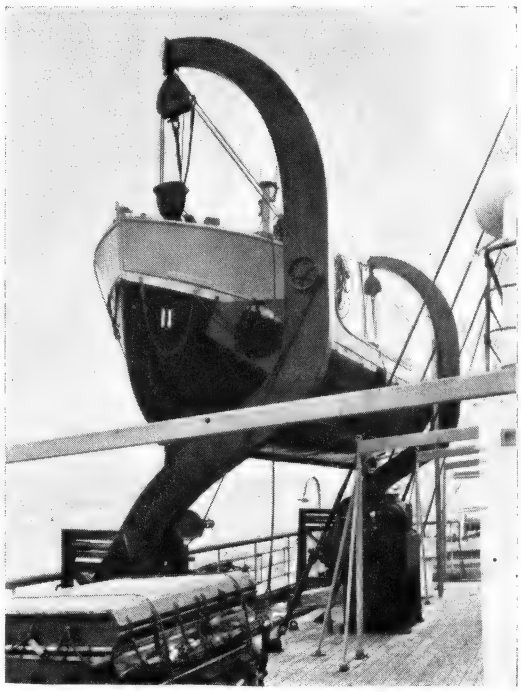
Yet another luffing davit is the Welin patent torque davit. It consists of a pair of luffing arms carried in bearing pedestals, the keel support and gunwale chock fittings being combined in the arms. It is put outboard by means of a pair of powerful torsion bars which form the pivot pins for the arms.

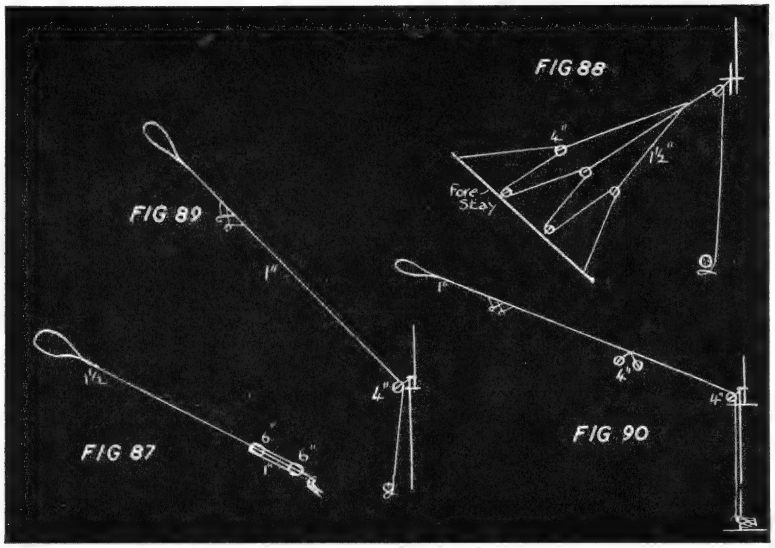
The bar on the forward davit arm extends to the after bearing pedestal to which it is anchored torsionally in a square hole, and the after arm bar extends forward in a similar manner, the two bars lying side by side at or about deck level. As the davit is luffed inboard each bar is " wound up " and the effort thus applied is used to swing the arms outboard as the bars " unwind." There are no links or bearings to wear and failure is virtually impossible.

Pictures are by courtesy of Welin-Maclachlan Davits Ltd.—E.B.

Below: In the Welin torque-davit keel support and gunwale chock fittings are combined in the arms

Right: The Overframe quadrant luffing davit





Battine does not given any mizen topmast stay to either the Fifth or Sixth rates but Deane does, so I follow him as I feel there must have been this support. I make it of $1\frac{1}{2}$ in. rope and attached it to the back of the mainstay by two small deadeyes, Fig. 87.

The spritsail topmast has only two shrouds aside and these are put on as the others. They are of $1\frac{1}{2}$ in. and the lanyards of $\frac{3}{4}$ in. Ratlines $\frac{3}{4}$ in. but I shouldn't put them more than half-way up.

The backstay of this little mast is complicated. Battine gives six 4 in. blocks and I have figured one of the ways in which they can all be used. The line that passes through the block at the masthead belays to one of the after deadeyes. Although Battine gives the number of blocks for the "crane-line," as it was called, he puts a blank for the rope sizes so I suggest that $1\frac{1}{2}$ in. would be suitable, Fig. 88.

Take your choice

The topgallant shrouds of the fore and main are two aside and, according to Battine, come down to deadeyes in the normal manner. But Deane does not show deadeyes. I describe with and without and leave you to please yourself.

If you opt for deadeyes they must be very small, $3\frac{1}{2}$ in. fore and 4 in. main ($4\frac{1}{2}$ in. equals $\frac{1}{16}$ actual). The strops of the deadeyes can be continued through the holes in the crosstrees and as their own futtock shrouds be seized to the topmast shrouds. If deadeyes are not used then bring the shrouds themselves down through the hole and finish off as futtocks. I should not put more than four or five ratlines on each mast. Shrouds are of 1 in. and lanyards (if any) $\frac{3}{4}$ in.

The topgallant stays, both of 1 in., are secured with a splice instead of a mouse. The fore, Fig. 89, goes through a 4 in. block at the head of the sprit mast and is belayed off on the opposite side to the backstay. The main, Fig. 90, goes to the after side of the fore topmast head where it passes through a 4 in. block and is belayed down on the foretop, probably to the back of the forestay.

There are no topgallant backstays.

● *To be continued*

HIGH SPEED BOATS GET SCORPION BADGE

AN official type badge symbolising the characteristics of fast-moving craft has been designed by the Royal Navy for fast patrol boats.

In this category are craft known in World War II as motor torpedo boats and motor gunboats, but minelaying coastal craft and craft powered by gas turbines are now also included.

The badge, superimposed on a blue field and headed with the Admiralty Crown, is heraldically described as: "a flying fish with the tail of a scorpion white and in base two bars wavy also white." It is ringed with a coil of rope.

The badge is based on that originally designed for the first Motor Torpedo Boat Flotilla in 1937, and subsequently used unofficially as a type badge for all M.T.B.s and M.G.B.s.

A flying fish is intended to symbolise the high speed and skimming characteristics of these light craft, while the scorpion's tail indicates the powerful sting of their armament.

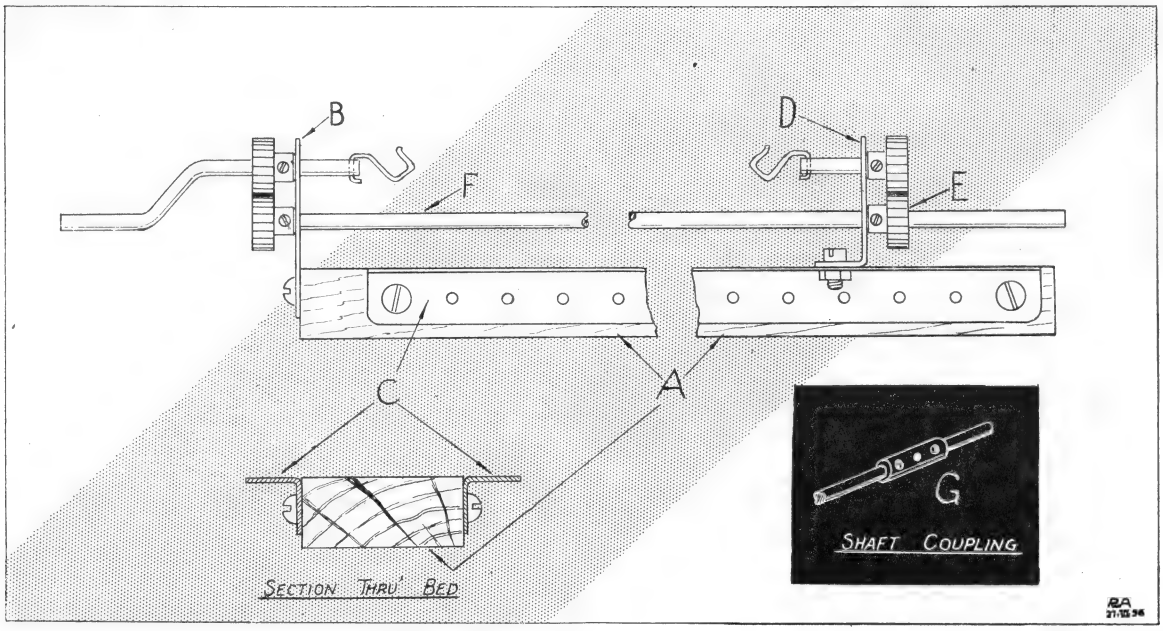
In a former design the sting of the scorpion's tail was facing aft—an allusion to the fact that torpedoes in the early M.T.B.s were launched astern through the transom. Since torpedoes are now fired ahead the scorpion's tail has been reversed.

OPPORTUNITY FOR RADIO CONTROL ENTHUSIASTS

ONCE again the 25 ft. square water tank will be featured at the Model Engineer Exhibition, which is to be held from August 22 to September 1 at the New Horticultural Hall, Westminster, for the demonstration of working models.

This feature has commanded great interest in past years from the visiting crowds and this year will be the focal feature of the Exhibition, combining with a model diesel car racing track. A seaplane is being built by Epsom District Model Flying Club which will take off from the tank (tethered to a central pole) and fly around.

The Model Power Boat Association and the International Radio Controlled Models Society have promised to supply models and demonstrators, but it is by no means certain that enough will be available and there is a great opportunity for individual and Club modellers who have boats of the required standard in these two categories to show their skill. They should obviously be willing to spend some time at the Exhibition demonstrating their models.



MECHANISED

WORMING AND TURNING

No more laborious work with this machine designed and made by P. W. AMIS

SOME TIME AGO I paid a visit to the R. J. Collins' shipyard—while he had his famous 50-gun ship on the stocks.

Mr. Collins showed me a lash-up he had concocted to assist him with worming ropes, which, broadly speaking, consisted of a hook which could be rotated by a handle. To the hook was attached the rope to be wormed, its nether end being attached to another hook which could revolve freely.

To do the worming he tied the contline to the rope at the handle end, then, by turning the handle, caused the rope to rotate and was thus able to pay out the contline and feed it into the spiral recess between the strands (the "cont") as this was presented to it. There was, however, a snag, because to get the neat appearance of a wormed rope or cable it was necessary to apply it under tension. This had a twofold effect: firstly, that the rope already wormed temporarily assumed extra turns and, secondly, the unwormed part became temporarily part unlaid. Hence, when the rope was finished and removed from the machine it was found to have its contlines in any but the right place!

Finally, it was decided that if both hooks could be made to rotate in the same sense and at equal angular velocities the rope could neither assume nor lose any turns. I duly designed and constructed a machine and presented it to Mr. Collins. His report was not long in coming and he was overjoyed to discover that he was not only able to worm a stay or cable in a few minutes, but was also able to apply considerable lengths of serving in an equally short space of time.

He did, however, have a suggestion which would make the machine even more versatile, so it could cope equally well with a strop on a block that needed serving or half a yard of mainstay requiring to be wormed—that the distance between the hooks could be varied.

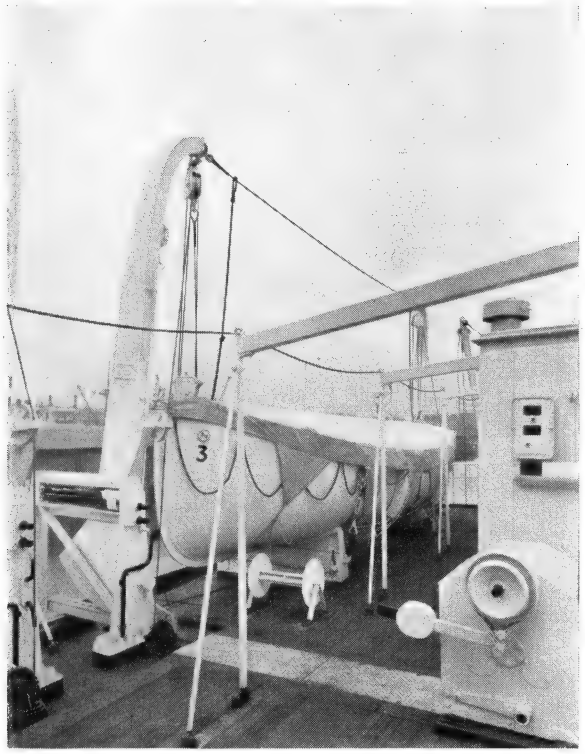
The essential features of the machine consist of two equal gearboxes, connected by a shaft, all of which can be constructed from Meccano or similar components. The gearbox to which the handle is attached I will call the headstock and the other, which can be moved along the bed of the machine, the tailstock.

It will be seen that the bed A consists of a piece of wood about $\frac{5}{8}$ in. thick, of a width that will suit the Meccano components at your disposal and of such a length that it will cope with the longest piece of rigging foreseeable (say 2 ft.). At the end, the headstock B is screwed directly on to the bed while along the sides of the bed are screwed L-section Meccano girders, C, using as many pieces as necessary to cover the whole length. The tailstock D is then constructed to allow its being bolted to the side girders across the wooden bed.

Thus it will be seen that the tailstock and hence the distance between the hooks can be varied to suit the job in hand. When altering the position of the tailstock the grubscrew in gear E is loosened, thereby allowing it to slide along the lay-shaft F; retightened afterwards. As it is unlikely that a sufficiently long piece of rod will be at hand for the lay-shaft and as it is also undesirable to have a long length whipping about on the afterside of the tailstock when working on short jobs, the use of connecting sleeves (as illustrated at G) is suggested.

This will permit the use of a piece of nominal length (say 6 in.) when working on blocks, etc., and keeping it permanently in the headstock, adding to it as required for longer work. The hooks are of bent wire, passed through cross holes drilled in their respective spindles.

A SHIP MODELLER'S



Above: Quadrant-type luffing davit. The arms are provided with a toothed quadrant at the lower inboard ends

★

IN CONNECTION with Scrapbook I have had many requests for information about the fittings of modern ships, more especially about those which show in a model.

Among the more prominent of these fittings are the davits which are used for handling the lifeboats. In historical ships these boats, which were stowed on deck, were handled by block and tackle from the yardarms. Later, they were handled by means of wooden davits hinged or fixed to the quarters of the ship in such a manner that the boats could be lowered from or hoisted up to the davits' outer ends.

Carried at ready

In wooden whaling ships the davits were curved timbers fixed to the ship, usually three pairs on each side, from which the boats hung while fishing so that they could be lowered immediately when a whale was sighted.

When iron came into more general use, davits were made to curve outwards so that the boats could be lowered clear of the ship's side. They swivelled in their sockets so that the boats could be swung inboard. This was the standard type of davit for both sailing ships and steamers for many decades.

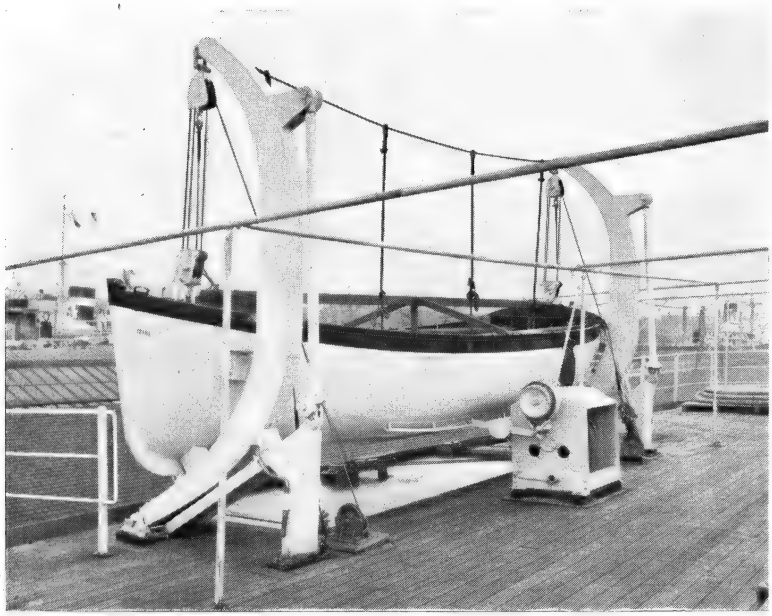
As the size of ships increased and lifeboats became larger and heavier some better means of handling them was called for and designers set about making improvements. It is most important that boats can be launched without fail in a heavy sea and when the ship is rolling heavily or has listed to a dangerous angle. Many lives have been lost due to the difficulty of launching the boats under adverse conditions.

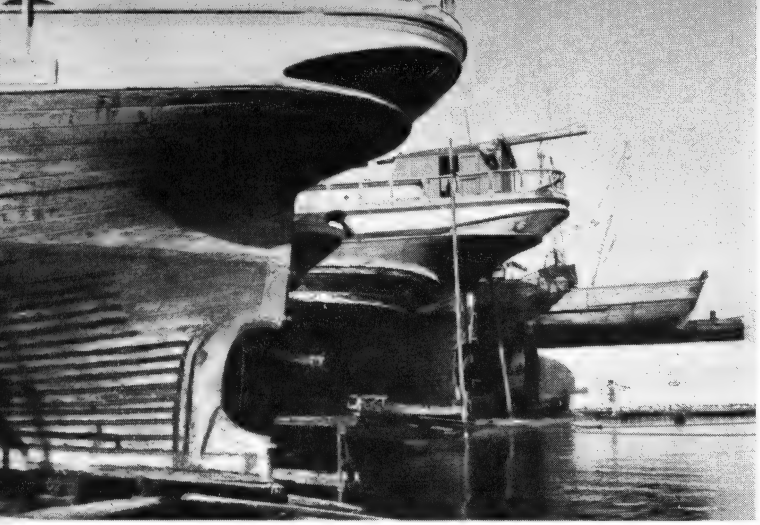
Two types

After a great deal of experiment and the testing of many different designs, the davit seems to have become standardised into two basic types. One is the luffing davit and the other the gravity davit.

In the luffing davit the arms are pivoted so as to hinge outward and thus take the boat into a position from which it can be lowered into the sea.

Below: The crescent davit. It is used for boats spaced end to end or where davits are positioned within the length of the lifeboat





ALAN VILLIERS gets caught up in a Hollywood turmoil when he goes . . .

IN SEARCH OF A SC

APART from the school ships it is getting very hard to find anything like a sizeable sailing vessel almost anywhere in Europe—I mean a sailing hull of 250 tons or so, 120 ft. long, which still *looks* like a sailing ship and still can sail.

There are plenty of auxiliaries of a sort around the Baltic, some of them good ships, but the number over 110 ft. long which can still sail is remarkably small. I doubt whether there are four in Denmark, half a dozen in Sweden or any at all in Norway. I know the Danish three-masted schooners *Artemis*, *Dannebrog* and *Vega*, and there is a Marstal ship called the *Frida* laid up at Marstal, where she has had fire aboard.

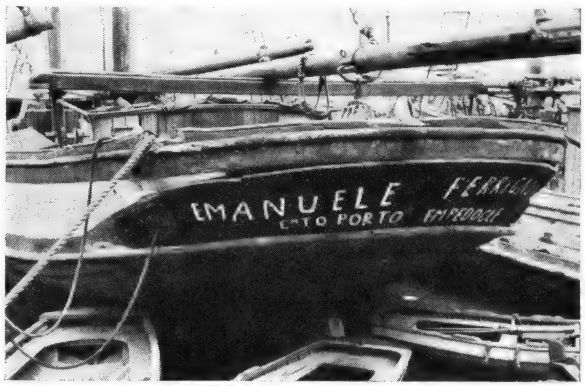
The *Dannebrog*, built in 1916, is of oak and beech and, like all the others, has long been an auxiliary. The *Vega* was built in 1919 and is still to be seen in Channel ports occasionally. She is a nice schooner and she can still sail. There are a couple of four-masters in Sweden, the *Inger* and the *Novik*, both built in Denmark. And there are still some softwood three-masters trading in the Baltic out of Finnish ports, I believe.

Elsewhere, there are schooners to be found in the West Indies, sailing locally out of St. Vincent in the Cape Verde Islands, on the Portuguese and Spanish coasts, around Las Palmas and—few nowadays, I believe—out of ports like Papeete in the South Seas islands. In Newfoundland the "schooners" of today are bald-headed auxiliaries though in Nova Scotia there were still a few old-timers about when I was last there five years ago. In Maine and on the Chesapeake Bay there are a few dude schooners (dude schooners are like dude ranches catering to the sea-minded—they offer short sailing holidays in sheltered waters). But the only considerable fleet of fair-size schooners still operating out of anywhere in Western Europe is the Portuguese codfishing fleet.

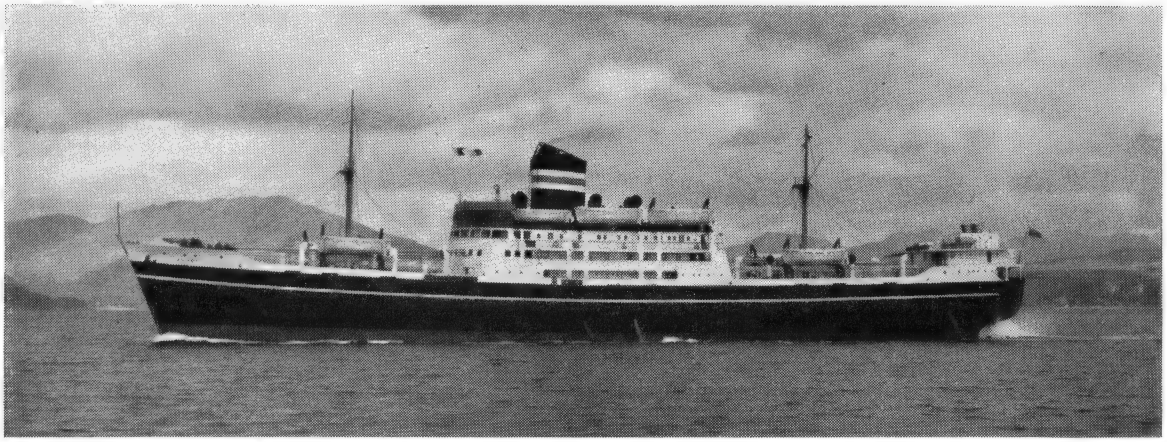
All this became an urgent problem to me recently when a movie man, dropping in from Hollywood, announced that his company could no longer find suitable hulls to convert for ship pictures anywhere on the west coast of North America (which surprised me, for I thought that some enterprising citizen had kept a few old three-mast schooner hulls at San Pedro or Wilmington just to hire out for conversion into frigates, pirate ships, and such) and so where could he find some now ?

He wanted two, and he wanted them in a hurry. They had to be at least 110 ft. long, built of wood, with useful auxiliary engines. They had to be available within a matter of days because he wanted to begin converting them at once into frigates of the Revolutionary wars. Ships in trade were no use to him, neither were ships too far away. The film had to begin shooting in July. This eliminated the Portuguese fishing schooners which had sailed for the Grand Bank.

Where the ships were to be found, I gathered, would also affect the film programme, for they must be somewhere that a sea picture could be filmed without the traffic of modern vessels getting in the way and without land all round the place. It was to be a colour picture in Cinemascope, which meant that the camera would take in a very wide horizon. The location for the ships would have to be some place where the land was to the south'ard and there was plenty of open sea to the north. Ideally, we should find a port where there was good protection as well as necessary conversion facilities (good wooden shipyards, timber, shipwrights, iron-workers, sailmakers and so forth)



The "Emanuele Ferrigno" at Palermo—laid up for lack of employment



the firm in 1952, while a third was bought the following year.

Faced with the promise of increased foreign competition, Manchester Liners had urgent need of further tonnage. As British yards could only offer delivery three years later the contract for the two vessels was placed with A. G. Weser, and the design of the ships—then already laid down—was slightly modified to suit them for the Great Lakes trade.

The first vessels in the fleet to have engines aft, they are of 2,700 tons d.w. and have an overall length of 258 ft., a mld. breadth of 42 ft. 6 in. and a draught of 18 ft. 5 in. There are three holds forward which are served by electric winches and one 20-ton and eight 5-ton derricks.

Two 8-cylinder supercharged Deutz engines drive a single shaft through Vulcan couplings. They develop a total of 2,000 b.h.p. and give a service speed of 12½ knots.

PILGRIM CARRIER

THE MOGUL LINE LTD. of Bombay are owners of a number of pilgrim ships, and they have lately taken delivery of the *Saudi*, a Clyde-built steamer of 5,973 tons gross.

This impressive looking vessel has a d.w. capacity of 7,300 tons and is designed for the Mecca pilgrim trade. She has accommodation for 12 first-class passengers in the midship structure and she can carry about 1,000 pilgrims in the 'tween decks. Her main dimensions are : length 395 ft. b.p. (426 ft. overall), mld. breadth 56 ft., mld. depth 36 ft.

Like the rest of the Mogul Line's fleet, the *Saudi* has been built by Lithgows Ltd., Rankin and Blackmore Ltd. being responsible for her propelling machinery. This consists of a steam triple expansion engine coupled to a Bauer-Wach exhaust turbine, the two developing a total of 4,000 i.h.p.

Interesting details of her external shape are the style of funnel top—one which is commonly associated with the Clan Line and the sloping line of the aft and forward ends of the superstructure. The lifeboats, ten in all, are made of aluminium and are fitted with Fleming hand-propelled gear.

PASSING OF PADDLE TUG

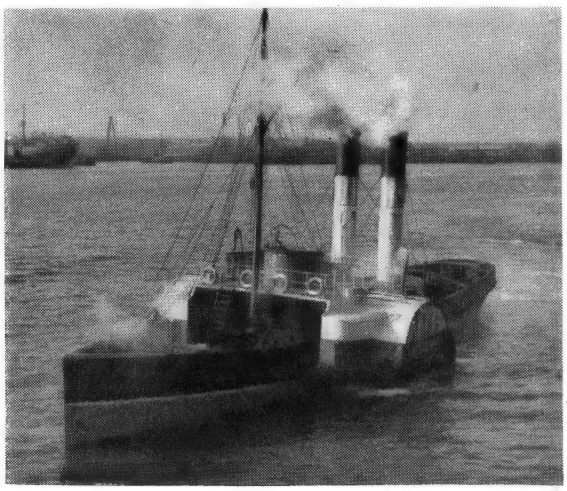
THE paddle tugs, which have been such a picturesque feature of the Rivers Tyne and Wear, are fast disappearing. During recent years the Anchor fleet of tugs, the most important one operating on these two rivers, has been undergoing a process of rejuvenation—by the building of new tonnage, by purchase and also by the repowering of the *George V*, which is now diesel driven.

In May the France, Fenwick Tyne and Wear Company Ltd., to give the full title, disposed of the last two of its River Tyne paddlers, the *Dunelm* and *Conqueror*. A few weeks later the *Wexford*, one of their River Wear fleet, was also sold. All three had been out of commission for some time. With the passing of the *Wexford* the firm has only four paddlers left.

The *Dunelm* and *Conqueror* were veterans in the true sense, for they were built as far back as 1883 and 1884 by a North Shields firm, Hepple and Co., who also supplied their two-cylinder lever-type engines.

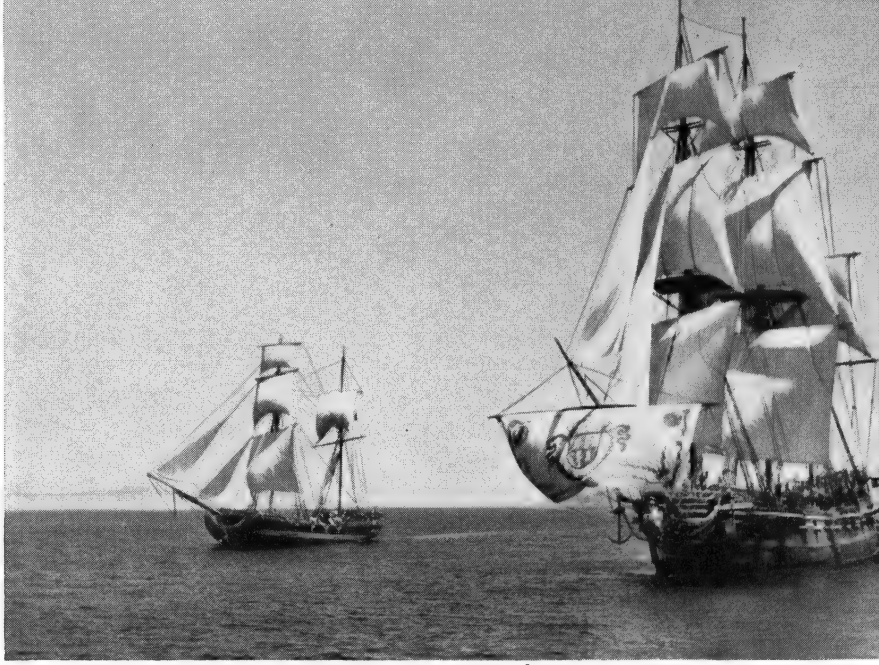
The former vessel, of 165 tons gross, was originally known as the *J. C. Stevenson*, while the 177-ton *Conqueror*, though launched as such, served as the *Conquerant* for one phase of her long career. Both have now been broken up at Gateshead, but by different firms—C. W. Dorkin & Co. and J. J. King & Co. respectively.

The single-funnelled *Wexford*, of 141 tons gross, was built a few years after the others, coming from the South Shields yard of J. T. Eltringham in 1888. She is now being scrapped at Sunderland by Thomas Young & Sons (Shipbreakers) Ltd.



The paddle tug "Conqueror." One of a disappearing breed

Left: Schooners on the slip at Trapani, Sicily, May, 1956



Right: "She . . . was an old French codbanging three-mast schooner from some Biscayan port." This is how she looked in the film, The Crimson Pirate

HOONER

and convenient hotels, not already crowded, where the vast armies of technicians, actors, extras and so forth could stay.

Where was such a place? Where were there suitable ships? It seemed that the only answer could be somewhere in the Mediterranean. Cyprus was out of the question—I have never been there anyway, and don't know the local schooner situation—and so was all Spain, for different reasons (chief of which was the difficulty of getting away from the high mountains, with a good sea background which the cameras could use without shooting into the sun). The answer seemed to be Sicily, the north coast of Sicily, and the port of Palermo. So we flew forthwith to Palermo, via Rome.

Established star?

As we were coming in by the mountainous approach to land at the rather small and hill-surrounded airport of Palermo, we saw a ship lying hauled out down in the harbour which looked like a frigate of the eighteenth century—a three-master with a high after-castle, big fighting tops on the three masts, a long, high-steeved bowsprit, and so forth. As soon as we landed we hurried to the waterfront to look at this curious ship, which my friend from Hollywood immediately recognised as a movie vessel, converted and used for some previous sea film. Was he going to find an easy answer to at least half his problem right there on the Palermo waterfront?

Unfortunately, it was not as easy as that. Nothing ever is. She was a movie ship all right, but she was also a wreck. The vessel was an old French codbanging three-mast schooner from some Biscayan port, which had been used by Warner Brothers for the film of Captain Hornblower and later for a couple of other sea films (the Crimson Pirate and the Master of Ballantrae).

We found her propped up on stone blocks, in very bad shape, and she looked as if she had been neglected for years. Planks were peeled off the underwater body, the keel was badly hogged and the whole afterpart of the ship sloped downhill. The false stern was practically hanging off, the plaster figurehead was a pathetic and weathered piece of junk, the masts were out of line, the standing rigging hanging in bights, the masts obviously falsified and all the yards were missing. The rudder was damaged and a couple of rusted iron brackets showed where she must once have sported a pair of inadequate screws.

Aboard she was worse. She *had* been a good job, but she had been allowed to capsize and lie full of water and, after that, she had been neglected. The yards were lying up on a quay nearby, close by a berth occupied by half-a-dozen small craft which had been brought in for smuggling (I was sorry to note that almost all these were obviously British war surplus vessels, M.F.V.'s and minesweepers, and most of them were registered in Gibraltar). The yards did not look too bad, but they were obviously not in period. The sails and some of the cannon were lying in a stone store not far away and these too looked all right.

But the nameless ship which had acted so well in at least three sea films was certainly not going to provide the answer for this one. Nor was there a sizeable schooner of any sort to be seen in the port, though it was crowded with sails. They were all smallish two-masters (just too small to be useful), lateen-rigged sailing lighters or fishermen. There was a vessel working cargo alongside, which looked as though she had begun life as a three-masted schooner, but she was now a full motorship and obviously earning good freights, for she was putting out general.

We quickly measured a couple of the two-masted schooners lying round the edges of the fishing basin, the best of which appeared to be the *Emanuele Ferrigno*. She was no use. Her overall length was about 92 ft.—just too small to think of converting into even a movie three-master. The film—at any rate in part—would have to be acted aboard whatever ships we selected and that meant that there must be room for cameras and technicians, lights and all the rest of it, to say nothing of the reasonable accuracy of the ship herself.

Possibly at Trapani

Then I remembered. When using the port of Augusta during the Sicilian landings, there had been a fine big wooden brigantine in port. I forgot her name, but I remembered her port of registration—Trapani. We telephoned the ports on the eastern coast of Sicily—Messina, Catania, Augusta, Syracuse. There were no sizeable schooners there now. We called the captain of the port of Trapani. Yes, he said, there was at least one vessel of a suitable size still in port!

Trapani is the best part of a hundred miles from Palermo along the coast road or a little shorter by the bandit-infested interior road (where the infamous bandit Guiliano had been operating until his death). We went

Left : "Manchester Venture" —a new Great Lakes trader

Right: s.s. "Saudi," one of the Mecca pilgrim ships

SHIPS IN THE NEWS

By LAURENCE DUNN

OVER THE COURSE of years, as each new Orient liner has been built, we have learned to expect much that is original and also controversial. Before the war the *Orion* caused much head-shaking among diehards by not having a mainmast, but this started a fashion which became widespread. Similarly her hull colouring—for which I was responsible—came in for much criticism, but it was interesting to see how other firms later adopted this buff or corn colour for their own vessels.

Recently some details of the projected Orient liner were released. The ship, which will be of about 40,000 tons gross, will be launched in 1959 for delivery the following year. By raising the service speed to 27 knots it will be possible to cut two weeks off the round trip from London to Australia and back. Although the vessel has not yet been ordered, details worked out by Vickers-Armstrongs show that this time saving will more than outweigh the cost of the increased speed. Approximate dimensions for the new liner are : length overall 804 ft., breadth 97 ft. and draught 31 ft. 6 in.

The photograph of the wind tunnel model shows many most interesting features. In contrast to the low hull plating aft, the customary forward well deck has been enclosed, thus raising the level of the uppermost full length or strength deck.

Discussion has naturally focused on the original shaping of the main funnel and the inclusion of a secondary one which will serve as an outlet for engine and boiler room fumes. In the National Physical Laboratory at Teddington it has been proved that the funnel will keep all smoke off the deck whatever the direction of the wind, and this has been achieved with a projecting casing less than half the height of the *Orsova's* 12 ft. "Welsh bonnet."

GREAT LAKES TRADERS

THIS is the age of the specialist ship, and at the present time we are witnessing the evolution and development of a variety of new types. For commercial needs, for example, there are the ore ships, the combined ore and oil carriers—both of them setting new records for size—the liquid gas and chemical carriers, others suited for container traffic, and one even for the carriage of orange juice in bulk !

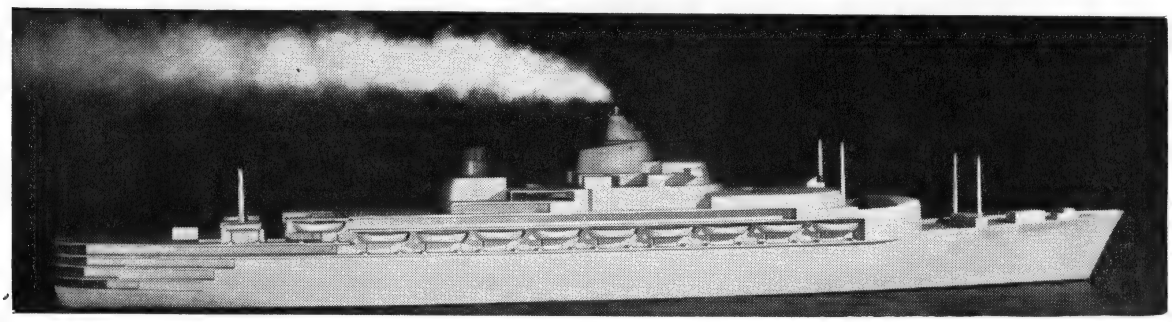
Interest in the Europe-Great Lakes trade has been steadily growing in recent years, and the knowledge that the St. Lawrence Seaway will one day be an accomplished fact has stimulated the urge to be "in" on what will undoubtedly prove to be a very important trade.

As is well known, the existing locks providing entry to the Great Lakes impose severe restrictions on size. Much new tonnage is being built on the Continent, almost all for foreign companies, and this gives added interest to two sisters which Manchester Liners Ltd. have recently put into service.

They are designed to meet conditions as they now stand; but at about the same date the Holland-Amerika Line took delivery of the far larger *Kinderdijk*, which is intended to eventually operate to the Great Lakes.

The two British vessels, the *Manchester Vanguard* and *Manchester Venture*, which will maintain a new monthly service between Manchester and Chicago, were built by the Seebeck yard of A. G. Weser. The first named was delivered on April 12, the other on May 24. They bring the Manchester Great Lakes fleet up to five, for two ships were built for

A model of the projected 40,000-ton Orient liner. She will have a speed of 27 knots



rubbing strake and is 6 × 14 mm., the extra thickness projecting outward beyond the skin. All strakes were first fitted and screwed to the frames with ¼ in. No. 0 screws. The screws were then removed and the planks glued into place, the screws being replaced.

Fin: This was built up bread-and-butter of eight layers, glued and screwed together. The screws used are 3 in. long and overlap.

Additional ribs: After the boat was removed from the moulds three extra intermediate ribs were fitted in the way of the fin where the wringing strain is greatest.

Deck beams, half-beams and carlines: These are all 6 × 14 mm., the thwartships members being laid flat and the longitudinal ones on edge. The fore-and-aft beams under the foredeck are doubled, with a gap between for the post of the radial jib-boom and a kingpost stepped on the keel to support the deck in the way of the mast, the latter being stepped on deck.

Deck: 4 mm. resin-bonded plywood, ruled out in planks, dropped inside the sheer strake. A 3 × 20 mm. covering board seals the deck edge. The covering board was cut to shape and its grain follows the curve of the deck edge.

Lead keel: This has one vertical bolt going right through the hull, three diagonal studs at right angles to the joint between lead and wood and one heavy brass screw through the after bottom corner of the lead into the fin deadwood.

Fastenings used: Aerolite 306 glue and brass screws.

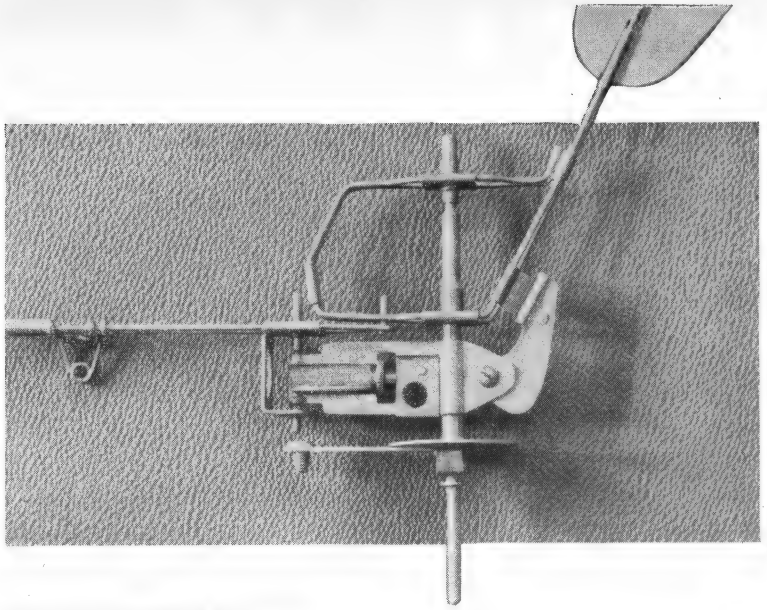
Unfortunately I cannot give full particulars of all *Danseuse's* fittings and rigging, but her vane gear cannot be passed over. The gear is of the Lascelles type, but there are some changes, notably in the thicknesses of the brass parts, which are made stronger, and in the pintles which are fitted with ball bearings. The main pintle of the vane, instead of being mounted on a brass deck plate, is made longer and its shank housed in a tube below the deckplate.

Instead of lifting the vane off its pintle when not in use the whole thing, including the pintle, comes off, the latter being attached to the vane gear. This was necessary to avoid the loss of the steel balls on which it turns and has the advantage of not leaving the pintle sticking up from the stern during travelling.

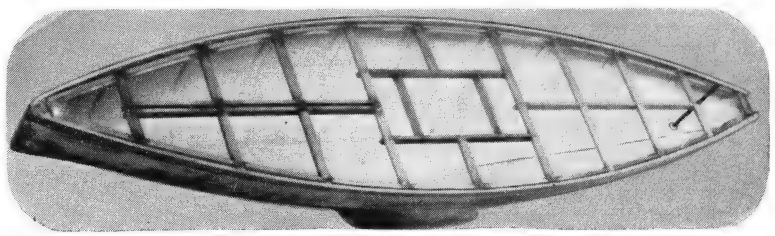
The rudder also swings on ball bearings, with the result that all friction is eliminated from the steering.

Dr. Leitão tells me that the vane was constructed rather lightly to permit its use on smaller craft, and in my design I allowed for a 6 oz. vane gear. As a result she at first trimmed a little by the bows. In consequence, a little trimming ballast was needed aft and the builder used a cable clamp which he put round the rudder tube. The advantage of this is that should he decide on a heavier vane later on, the weight can be removed easily.

The boat otherwise has proved perfectly balanced and, once the mast position was determined, she required no weather helm to windward beyond the theoretical 1-2 deg.

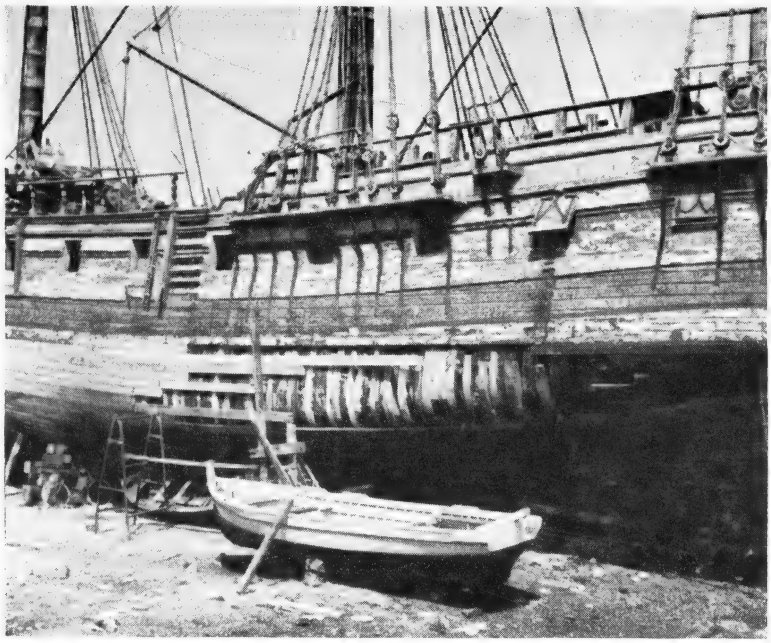


Details of the Lascelles vane



Fully planked, three extra bent ribs, and one deck beam holding rudder tube. Deck beams, carlines, etc., ready for plywood decks

Poster used at first Portuguese Nationa Salon, Lisbon, 1956



She had some new planking—though not enough—and her hull was as wavy as an R.N.V.R sub's gold braid

The false stern of the nameless ship at Palermo

to Trapani and there, across the harbour, was a fine large wooden brigantine with a couple of yards standing. And, hauled out on a slip by the waterfront road, at least one more. Both ships looked good.

We went to the slip first, where the old-fashioned cutwaters of not one but two large wooden ships towered above the passing cars and decorated Sicilian carts. They were the brigantine *Marcel B. Surdo*, now an auxiliary but still carrying two square sails on the foremast and a big gaff-and-boom mainsail, and the *Angiolina H.*, rigged as a two-masted baldheader, with spindly masts. She also had been a brigantine for the first 30 years or so of her long life (we discovered she was built at Viareggio in 1904) but she had no yards now, and the masts she had stepped were useless for square rig.

Two good choices

She was 100 ft. long with a beam of 24 ft. 6 in. and a depth of 12 ft. Her hull was in first-class shape and so were her decks, except that a very large main hatch with high coamings had been built into her, obviously to expedite cargo-handling. This would have to go. Frigates didn't have large cargo hatches.

The *Marcel B. Surdo* was larger, with clearer decks. She, too, was built at Viareggio—in 1915—as a 280-ton brigantine crossing a single topgallant and a small royal over double topsails on the foremast, but she had had an engine for 20 years. With the power installation, her rig had suffered the inevitable reduction. The fore topgallant mast and the main topmast were removed and the bowsprit shortened.

She is run nowadays by a crew of seven men and she was employed tramping, mostly in the coal trade from Sardinia to Sicily. Schooners and brigantines have almost disappeared from the central Mediterranean, except from Trapani, where the carriage of coal from Sardinia and trade to the offshore islands still offer some employment. The *Marcel B. Surdo* was coppered and in good order. She had a suit of sails aboard, some of which would do for her conversion to a frigate.

She was for sale, we heard, for a price said variously to be anything from 12 to 14 million lire—about £6,500 to £7,250. She was 120 ft. by 27 ft. 6 in. by 12 ft. 8 in., and she was owned by a large family which, as we stood below the bowsprit looking up at her that sunny afternoon, appeared to consist of at least 18 different members, none of whom spoke English. However, my business was to find ships and not to bargain for them, for which I was thankful. If we found ships a high-power lad would soon fly across from New York to buy or charter.

The *Marcel B. Surdo* and the *Angiolina H.* were both good vessels—which was just as well, for we found that the other brigantine across the harbour was not in the market. She was a fine wooden ship named the *Fratelli Ciotta*, about the same size and the same rig as the *Marcel B. Surdo*. Try as we would, we could not get aboard. She was lying to her own anchors, a little off-shore, and it was not possible to inspect her without a boat. All efforts to find a boat failed and at last we found the explanation—she was under arrest for smuggling !

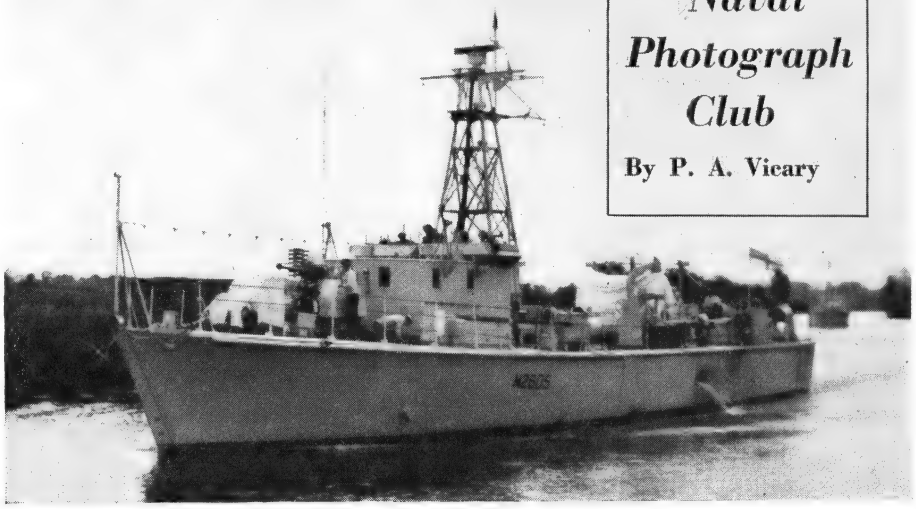
Pressure from New York

She was abandoned as a constructive total loss (with a broken back and sundry other imperfections, according to one informant), although the hull was in good shape and she looked all right. The fact appeared to be that she, too, was owned by a large Sicilian family, the members of which were quarrelling about her and she was the subject of litigation. While the family argued the ship did no work, and it was not possible—apparently—to get permission to inspect her. This was a pity, for she would have suited better than the smaller *Angiolina H.* And we thought the family could have argued about her price rather than the ship itself for she would soon be worth nothing if they continued to withhold her from employment.

These ships were the only sizeable and suitable ships which we found. In due course the high-power lad flew across from New York and arranged to buy them. He wasted no time. He surveyed, he argued with the representatives of the 18 brother-and-sister-owners, and he drew up a contract, signed a cheque and departed. And so the *Marcel B. Surdo* and the *Angiolina H.* will very shortly be withdrawn from the small lists of working windjammers to take on a more colourful career—at least on a temporary basis.

Naval Photograph Club

By P. A. Vicary



H.M.S. "Bassingham," one of three minesweepers that made a courtesy visit to Norfolk recently

THE CENTENARY of the commissioning of H.M.S. *Cambridge*, a 78-gun wooden ship of the line, in August 1856 as Devonport Gunnery School was marked by a dinner in the wardroom mess at the R.N. Barracks Devonport recently.

The original ship was built at Deptford in 1815, and was replaced by a 100-gun steam wooden vessel *Windsor Castle* built in 1858 (renamed *Cambridge* in 1868). In 1891 she was joined by the 84-gun *Calcutta* of 1831 (renamed *Cambridge II*). These two ships continued in service until the school was moved ashore in 1907 and incorporated into Devonport Barracks.

It was in 1838 that the school of Naval gunnery was first established at Plymouth on board the *San Joseph*, working on principles " . . . so sound and scientific that at the end of six months, the boys and others who had received instruction were considered perfect in the art. . . ." This school continued until 1841 but it was not until 1856 that the Admiralty recognised the need for a gunnery school at the West Country port by commissioning *Cambridge* there.

During the half century of her service as gunnery school, sea-going ships were attached to the *Cambridge* for practical drills and firings and by the end of the century she had a battleship, a coast defence ship and five gunboats in attendance. She was broken up in 1907.

* * *

H.M.S. *Corunna* of the Fourth Destroyer Squadron has visited the town of la Corunna in north west Spain, and took with her contingents of Army regiments which took part in the famous battle during the Peninsular war in 1809. Wreaths were ceremonially laid on the grave of General Sir John Moore, who was killed in that action.

The first of the new diesel-electric paddle tugs, *Director*, ordered by the Admiralty has been launched at Scotstoun, Glasgow. Though primarily for harbour service, these new tugs conform to the recognised requirements for towing and salvage services. Paddle driven tugs are found, by experience, to be the most suitable for moving aircraft carriers and other large warships in confined waters of dockyard basins. One, possibly two, of these new tugs will go to Portsmouth, where the strength has been recently augmented by the arrival of the new twin-screw vessel *Confidance*.

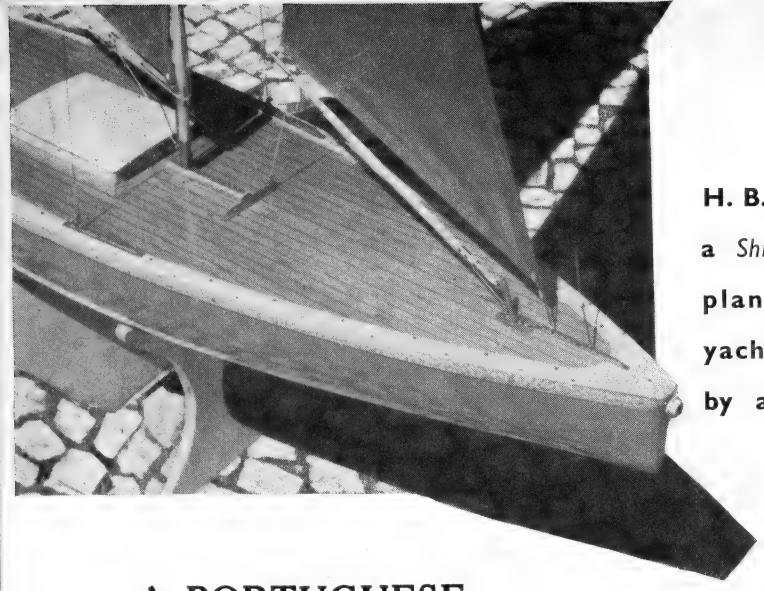
* * *

Ten new coastal minesweepers form part of the Patrol Service along the Cyprus coast, which has become another standing commitment of the Mediterranean Fleet. While away from Malta, ships of the force are temporarily controlled by Rear Admiral A. C. Miers, V.C., Flag Officer Middle East.

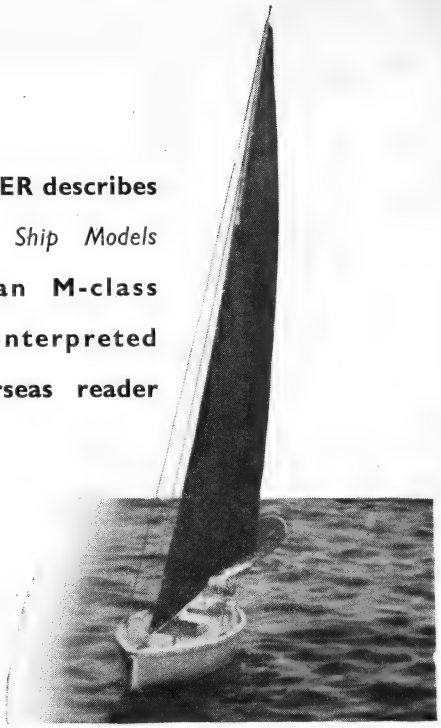
The force, consisting of about 12 warships, operates mostly at night and has well-defined powers. The ships may stop, put armed parties aboard and search any suspicious vessel they find in or follow into territorial waters. They are not authorised to intercept any vessel outside the three mile limit.

* * *

H.M.S. *Cumberland*, the trials cruiser, has been carrying out various tests in the Mediterranean with the new armaments which will be installed in the Tiger class cruisers. Mounted in the *Cumberland* are the new 6 in. and 3 in. turrets from which various firing tests were made. The former, which has a high rate of fire and is fully automatic, has been designed and built by Vickers-Armstrongs.

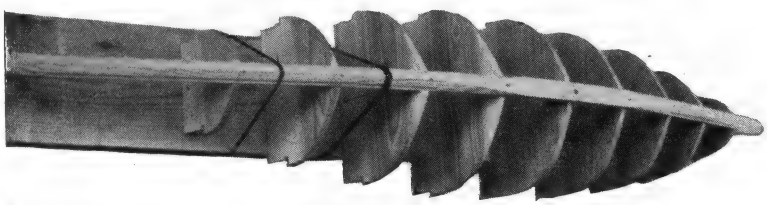


H. B. TUCKER describes a *Ships and Ship Models* plan for an M-class yacht as interpreted by an overseas reader



A PORTUGUESE WATER-NYMPH

DESIGNERS like to have news of models built from their plans. Hence I was glad to have a letter from Dr. Manuel Leitão of Oeiras, Portugal, giving full particulars and enclosing a splendid set of pictures of his yacht *Danseuse*. However, he carried his planking rather lower on the keel than usual. This builder not only built his hull, but made all his own fittings including vane steering gear, spars and sails. Included in his set of photographs are pictures of most of the fittings. Space precludes the publication of the whole of the set, but much ingenuity is shown as well as good workmanship, and Dr. Leitão is revealed as not only an excellent model builder but a very able photographer.



Building boards, moulds and bending of the keel

This M-class model is built to the lines of my *Water-Nymph*, which appeared in the July, 1955, issue of SHIPS AND SHIP MODELS. This design is distinctly different from the average boat of her class as her bows have a decided flare, rather like a motor launch—while the deckline aft is pinched in, giving the transom a slight tumblehome. Although this makes her a smart and unusual looking craft, it was not done merely for the sake of looks or to be original, but to provide extra buoyancy and reserve power in her forward topsides and make her dry and sea-kindly.

I had thought that the flare forward, coupled with the tumblehome aft, might present some difficulty to plank. But Dr. Leitão tells me that he had no trouble planking *Danseuse* except in the garboard angle, which is exactly in accordance with the rating rule.

The hull particulars

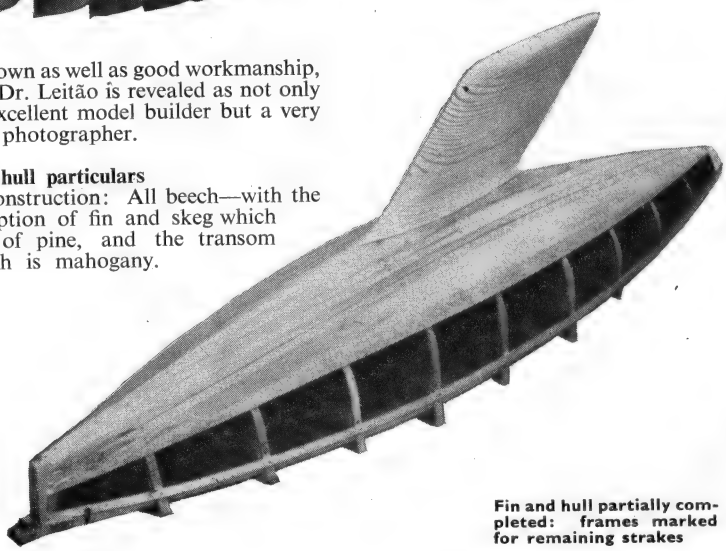
Construction: All beech—with the exception of fin and skeg which are of pine, and the transom which is mahogany.

Keel: This is built up with a central member running full length from bow to stern. There are two cheeks in the way of the fin, the whole being united by a $\frac{1}{4}$ in. layer running the full width of the fin. The timbers are housed in a rabbet instead of each being in a separate notch.

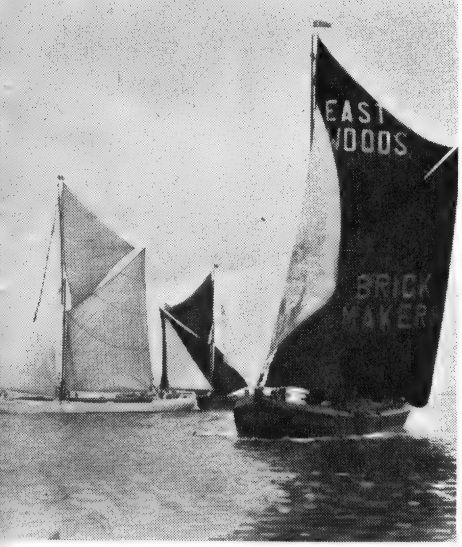
Clamps (or inwales): These are full length, 10 mm. square.

Timbers: The 3×10 mm. bent timbers are fastened to keel and clamps with glue and $\frac{3}{8}$ in. screws.

Planking: Of 3 mm. beech, with 10 mm. wide garboard strakes, the remainder being 20 mm. wide on the midship section with the sole exception of the sheer plank. This also acts as a



Fin and hull partially completed: frames marked for remaining strakes

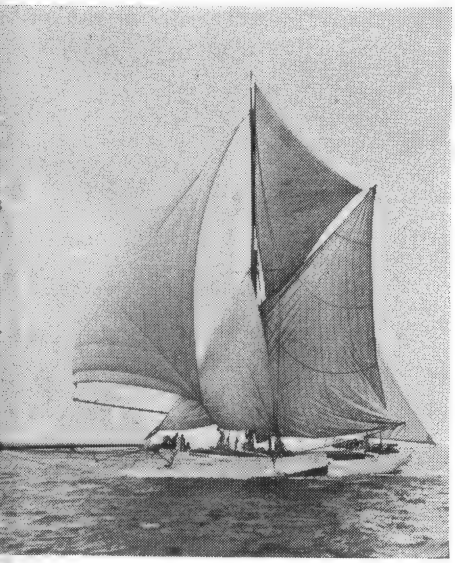


Left: "Westmoreland" and "Veronica" crossing the starting line

Below: "Sirdar" coming up aft of the tug "S. A. Everard"

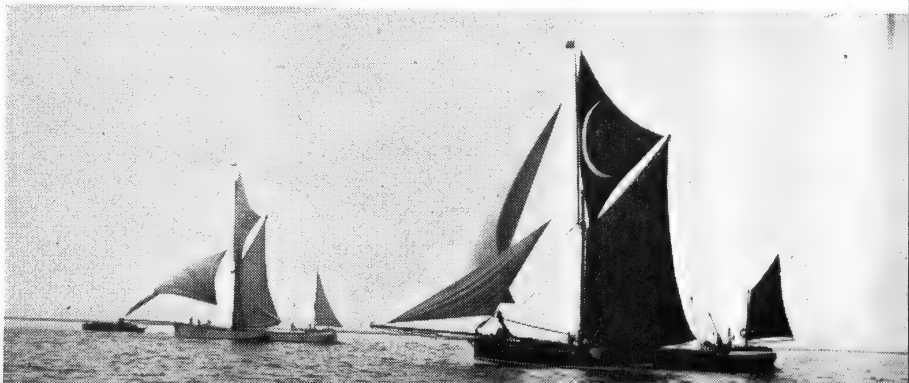
RACE

David MacGregor and Alan Villiers compare notes



Left: "Veronica's" huge spinnaker is pulling well

Below: "Sirdar" overtaking "Sara"



RADIO CONTROL at Poole Regatta

Above: A cabin cruiser enters the dock in perfect style

Top right: Mr. Wilson's M.T.B. secures first place in the novelty competition

POOLE REGATTA has established itself as the principal annual competition for radio control boats in the south of England. The model yacht club's interest in radio control and the shape and size of its lake have been a powerful factor in bringing this about.

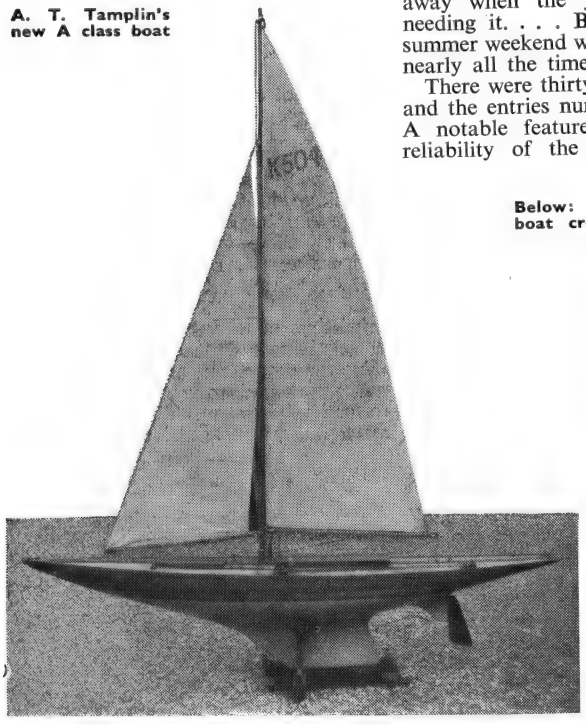
This year the weather was favourable except that the wind blew when the power boats were competing, fading away when the yachts were most needing it. . . . But it was a good summer weekend with bright sunshine nearly all the time.

There were thirty-three competitors and the entries numbered eighty-five. A notable feature was the greater reliability of the radio equipment. Failures were rare and the performances generally were of a higher standard.

Significant was the growth of interest in the radio control of yachts—no less than four M class and five A class boats being entered. A newcomer to the A class was A. T. Tamplin, of Chichester, who had an excellent yacht and an original system of connections for his sheet control. With his expert knowledge of electronics—readers may recall his radio control tank which opened the Model Engineer exhibition a few years ago—and his long experience of model yachting, Mr. Tamplin will be a valuable recruit to this phase of radio control.

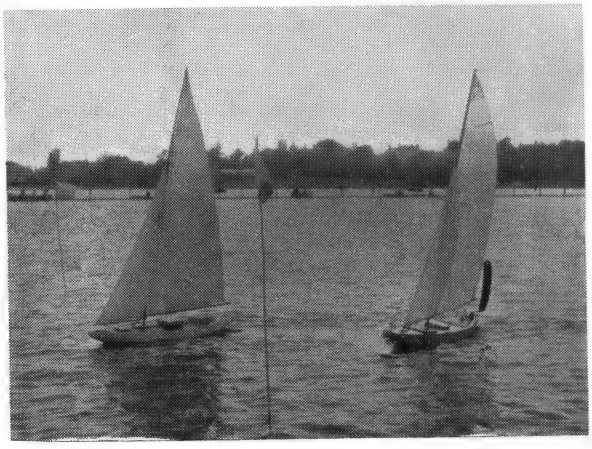
Messrs. Warne's and Gascoigne's

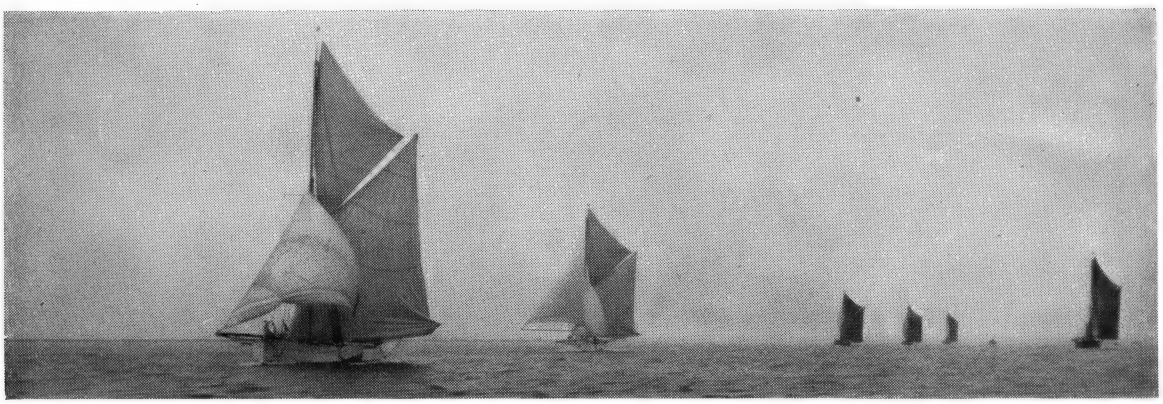
A. T. Tamplin's new A class boat



Below: G. H. Redlich's boat crosses the line first

Right: Col. Bowden's experimental yacht with fully battened sails and rotatable masts



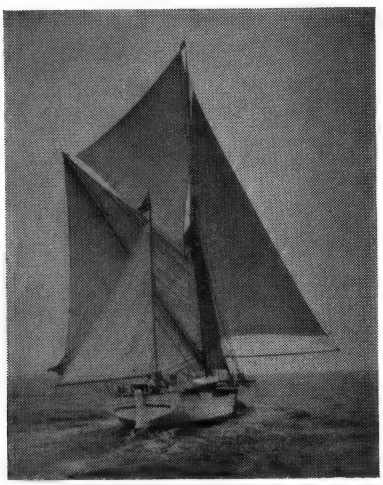


Above: The race—general view of the "field"

Below: "Veronica" running well. Note her Bermuda mizzen

Bottom: "Sirdar" running before the wind

THAMES BARGE



It was a cool, grey morning with a hint of drizzle in the air when the diesel tug *S. A. Everard* left the pier at Gravesend.

There was a light breeze—just enough to fill the sails—which came mainly from the south-west, and it was fascinating to see how well the barges got along. With their bluff bows there was naturally a considerable bow wave, but the easy run under the quarters was very noticeable.

There were six entries, three in each class. In the Champion Bowsprit class were the two Everard barges, *Sara*, of 50 tons built at Conyer in 1902, and *Veronica*, of 56 tons built at Greenwich in 1906, and the London and Rochester Trading Company's barge *Sirdar*, last year's winner, of 53 tons built at Ipswich in 1898.

In the Restricted Staysail class the entries were the two I.C.I. barges *Dreadnought*, of 70 tons built at Sittingbourne in 1907, and *Edith and Hilda*, of 56 tons built at Rochester in 1892, and the Eastwood barge *Westmoreland*, of 43 tons built at Conyer in 1900.

Each barge had a crew comprising master and three hands.

Sara and *Veronica* had white sails—presumably they were new and there was insufficient time to have them tanned — and both had Bermuda mizzens. These may be more efficient than the ordinary spritsail mizzen, but they do not harmonise so well with the big spritsail and somehow detract from the typical barge outline.

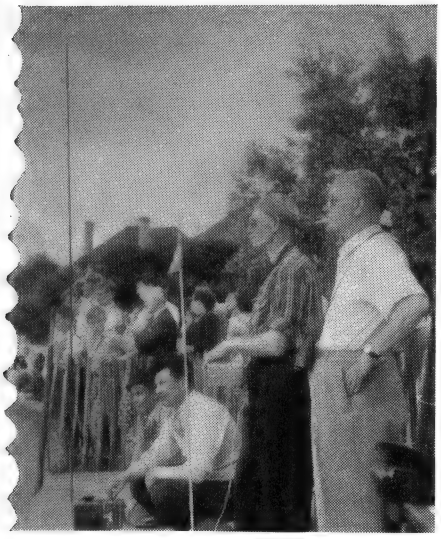
The cloths in some of the sails seemed to be sewn to give a ribbed effect. It would be interesting to know if this was intended. In any case the winner's spinnaker and mizzen were outstanding examples of this, so apparently it had no detrimental effect on speed. Generally speaking, both hulls and gear were in first-class order and the water reflections on the sides of the hulls showed the amount of attention they had received.

As I moved toward the starting line the barges were manoeuvring for position and then, as the starting gun was fired, *Veronica* found herself badly placed . . . *Sirdar* and *Sara*, however, got well away, and some time elapsed before *Veronica* got her spinnaker set and settled down. *Veronica* gradually overtook *Sirdar* and with *Sara* lying third, this position was maintained throughout the remainder of the race.

It was practically a run on a very broad reach all the way to the turning point—the North Oaze buoy—and this was rounded by *Veronica* at 1.33 p.m., by *Sirdar* at 1.37 p.m. and by *Sara* at 1.39 p.m., good consistent work for 2½ hours' sailing.

It was a matter of long and short tacks on the way home and there were some fine displays of skilful handling—though the Bowsprit class was considerably faster than the Staysail class. *Veronica* increased her lead on *Sirdar*, and *Sara* was falling away from *Sirdar*—so even the three leaders got further apart.

It was not an exciting race and at no time was there any tussle for position. But it was a delight to see the lovely set of the huge sails and the way the ships were handled. If the spritsail barge disappears from the river, we shall have lost a beauty which the powered vessel can never replace.—E.B.



A study in concentration. Messrs. Compton and Gascoigne racing their yachts

two M class yachts *Ballerina* and *Antoinette* were present. Owing to a slight defect *Ballerina's* steering control was not functioning satisfactorily and although she sailed once or twice she was unable to show her paces with her stable companion in Event VI as had been hoped. However, C. F. Compton sportingly offered to race his much older boat against *Antoinette* and although he was beaten, spectators witnessed radio control yachts racing together.

There were nine competitors in Event IV which was a handicap sailing race for the Bravery Challenge Cup. Col. Bowden was doing well with his A class yacht with fully battened sail, but he struck a flat calm as he was approaching the most distant buoy and he exceeded the time limit in his attempts to persuade his boat around it. Mr. Tamplin was the winner in this event. He had a nice breeze and made a faultless circuit, as did Mr. Gascoigne with *Antoinette* which, on corrected time, was only 12½ seconds behind the larger boat. H. C. Aldridge of Bristol was third.

The first event, a sailing race for A class boats, was for the Taplin Challenge Cup. This was won by G. Honnest Redlich with his well-known A class boat. This is by no means a modern yacht but Mr. Redlich, after many years' experience, has so mastered the art of sailing under radio control that he generally finishes high among the prizewinners. Both this and Event VI—for the Hogg Challenge Cup—were for boats up to 50 in. long and they were sailed under the Yachting Association's racing rules.

There were nineteen competitors in Event I which was a two lap race for power-driven boats. This was won by Max Coote of London, with M. Tamplin of Birchington second and W. S. Warne third. Mr. Warne was sailing his Daniel's designed *Amazon* and Max Coote had a powerful new boat of attractive design with the funnel aft.

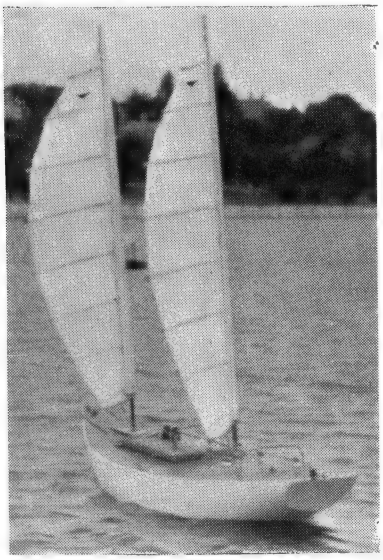
Event II was for electrically-driven boats, the winner being J. Merrick of Birmingham. But there were only two entries.

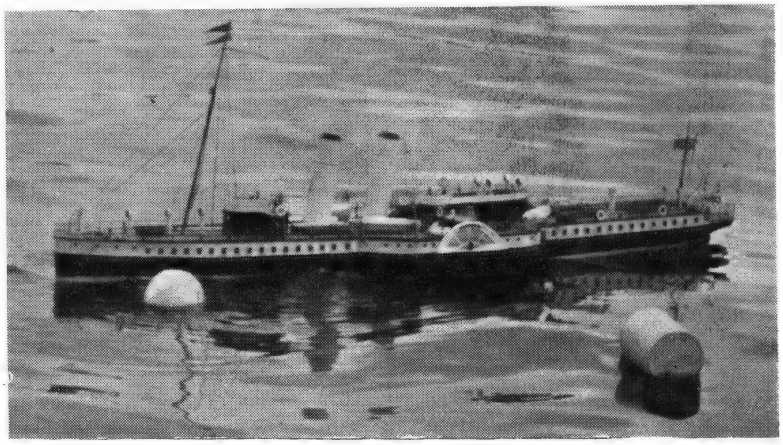
In the novelty competition (Event III) for which there were five entries, Mr. Wilson of Birmingham demonstrated his model M.T.B. She sounded her hooter, rotated the gun turret, fired her gun and dropped a depth charge. P. Cummings of Byfleet won second prize and Mr. Jennings with his model of P.S. *Devonia* third. The other power-boat item was Event V, a steering competition for the Freeman Challenge Cup. R. Curwen secured first place with his motor cruiser *Vanessa*. Her 4-cylinder Seal engine was greatly admired. Mr. Batten was second, Mr. P. Cummings third and Mr. Mogg fourth.

During an interval Col. Bowden gave a fine demonstration of sailing with his 9 ft. model schooner. As will be seen in the picture she has two fully-battened sails on rotatable aerofoil-sectioned masts. The masts and sails are rotated by radio.

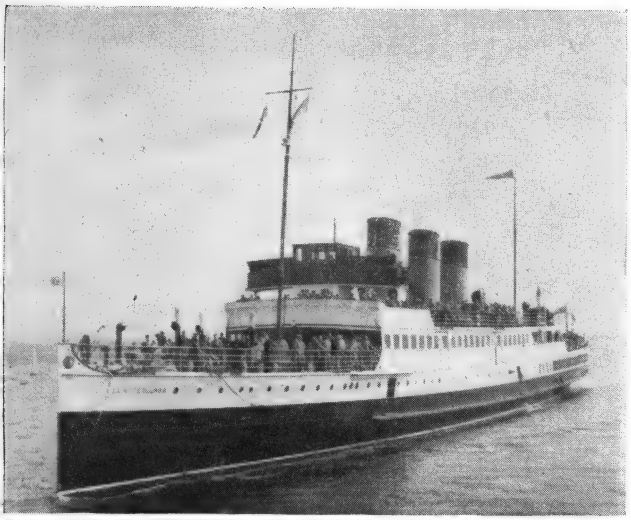
After the demonstration the model lay at anchor with masts and sails set to leeward. And although the sails were fully set she remained still with no strain on the anchor cable. This is a model one-fifth of the size of the larger yacht which Col. Bowden has built and in which he is carrying out a series of full-size tests. The use of the model which, incidentally, has a displacement of about 200 lb. has lessened very considerably the cost of the full-size experiments.

Above: Col. Bowden, Mr. Carrington-Wood and Mr. Tamplin racing yachts





Below: Mr. Jenning's fine model of the Bristol paddle steamer "Devonia"



Left: "Saint Columba" arriving at Dunoon on the Ardishaig-Gourock run

Bottom left: "Lochfyne" coming into Gourock on the early afternoon run from Tarbert

Right: The David MacBrayne symbol which is used as a figurehead

Below: "Lochbroom" arriving at North Pier, Oban

longevity, particularly the steeple-engined *Glengarry*, which lasted for eighty three years, and *Glencoe* which plied from 1846 to 1931 !

The last oscillating engined vessel in the fleet was the P.S. *Gondolier* which was built in 1866 for service on the Caledonian Canal. After the outbreak of the second world war she was sunk as a block ship at Scapa Flow. In 1944 MacBrayne's last paddle steamer, the modern-looking *Pioneer* built in 1905 by A. and J. Inglis Ltd., was requisitioned by the Admiralty and is now stationed at Portland as a floating laboratory.

The first screw cargo steamer in the West Highland trade was *Lochfine* which was built in 1847 and acquired by Burns Brothers three years later. The sole representative of this type in the fleet is the Canadian-built *Loch Frisa* of 519 tons, which was acquired in 1949, as the triple-expansion engined *Hebrides* of 585 tons which had been built in 1898 by the Ailsa Shipbuilding Co. was scrapped in 1955. She formed part of the McCallum, Orme fleet acquired by MacBrayne after the war.

First of the motor vessels

In 1905 the company's first motor vessel was placed in service, an overgrown launch named *Comet* which latterly operated the Lochgoilhead service until this ceased in 1946. What may be regarded as the prototype of the present fleet appeared in 1908. This is *Lochinvar*, which has never varied from the Oban-Tobermory service. She is no beauty, having a very small funnel in contrast to a large crane and was re-engined in 1949 with two sets of six-cylinder Davey Paxman motors.

The first vessel to be built after the 1914-18 war was the 777-ton T.S.S. *Lochness* which appeared in 1929 and was sold last year to Italian owners.

A new profile

In 1930 a pair of sister diesel ships, the 542-ton *Lochearn* and *Lochmor* were built by the Ardrossan Dockyard Ltd. for the Inner and Outer Islands service from Oban and Kyle of Lochalsh, respectively. They had the new profile of straight stem, cruiser stern, two masts and a single funnel, but the passenger accommodation was a great improvement on that formerly provided. A speed of less than 10 knots was obtained and in 1948-9 the vessels received two 12-cylinder Paxman-Ricardo engines.

There was an event of some importance in 1931 when *Lochfyne*, the first British diesel-electric passenger vessel, was completed by Denny of Dumbarton with Davey Paxman diesel engines and Metropolitan-Vickers electrical equipment. Of 754 tons with a length of 209.9 ft., she has two funnels, the forward one being a dummy. She appeared with a grey hull, but soon reverted to the traditional black. In summer she sails between Oban and Fort William, and in winter comes to the Clyde for the Loch Fyne service. New engines were recently installed.

A second, but smaller, diesel-electric vessel was turned out from the same yard in 1934. This is the 568 ton *Lochnevis* which operates the Portree service from Mallaig. In the war she acted as a minelayer.

During the 1930s several steamers were transferred to the MacBrayne fleet from other owners. The most interesting of these was *Lairdsrock*, from Burns and Laird Lines Ltd., which had been built by A. and J. Inglis in 1898 as the *Vulture*. Renamed *Lochgarry* she became the largest unit of the MacBrayne fleet but was requisitioned in 1939 and three years later foundered with heavy loss of life while in service as a transport between Scotland and Iceland.

Maiden voyage delayed

With the end of the war a contract was placed with Denny for a new ship for the Kyle of Lochalsh-Stornoway service, the *Loch Seaforth*, but owing to the exceptional conditions then prevailing she did not make her maiden voyage until December, 1947. With a gross tonnage of 1,089 and a length of 229.4 ft., she has both first and third class cabins. The cargo space is forward.

Two set of Sulzer engines are installed and radar was fitted in 1949 at which time the funnel was lengthened. An unusual feature is the use of the MacBrayne *Highlander* symbol as a figurehead.

In the summer of 1955 the new 1,084 ton *Claymore* arrived at Oban to take over the Inner Islands service from *Lochmor* which is now held in reserve at Greenock. Built by Denny, *Claymore* has two Sulzer diesel engines, giving a speed of 12½ knots, and passenger accommodation which includes an observation lounge and single berth cabins. Of typical modern appearance she bears little resemblance to her clipper bowed name-sake of 1881.

For a time after the war several cargo ships were on charter but new motor vessels, with machinery aft, have been added to the fleet. They are: *Lochbroom* 1948; *Lochdunvegan* 1950; *Loch Carron* 1951; and *Loch Ard* 1955. In addition there are five motor launches and 11 ferry boats.

Jason's notes

DURING A BUSINESS trip to Ulster I was able to meet the members of the Belfast society and very agreeably surprised I was. They've been going since 1947 and at least one of their members is up to Medal standard.

I was surprised to find that they have no set regular subscription; at their meetings every third week the hat is passed round. In their nine years' existence they have never varied from this, and they have a balance in hand.

The members, between them, have a wonderful library. In addition, the local library is very helpful. I wonder, however, if the Belfast members are aware that the library possesses records of British and Irish patent specifications from 1870 to 1927—wonderful ground for research into technical details of anchors, davits, and a host of other nautical items. Patents are granted to individuals and not to companies.

If you know the year that a particular ship's keel was laid like as not you'll find in the records for that or the adjacent years one or two patents relevant to that ship.

A balanced society

THE Belfast society seems to be a well balanced one. I saw a very creditable *Archibald Russell*, the famous four-masted barque, and a small scale Thames sailing barge. Incidentally, the members' badge has a Thames sailing barge as a centrepiece.

The society's chairman, C. Bamford, is a powerboat man who holds that the ship is more important than the power unit. His latest work is a 30 in. motor launch, *Lady Daphne*. He is an engineer, too, and he has completed a twin-cylinder marine engine.

Mr. Clark specialises in native craft, and the secretary, Tom Dickey, is at home in longshore British craft. Both these latter members work to the same scale which gives small models. Mr. Dickey also showed an excellently made Boyne coracle with framework to a 1 in. scale. He used the " hairs " from a bass broom.

The city without a past

BELFAST possesses the largest shipyard in the world, namely the well-known yard of Harland and Wolff. Many famous ships for peace and war have been built there. As a seaport, however, the Ulster capital is a mere upstart compared with, say, Southampton, which sent fleets to the Crusades, or Bristol, which sent its argosies to the West and beat even Columbus to the American mainland.

A few miles eastward from Belfast, on the northern shore of Belfast Lough, is that hoary old seaport of Carrickfergus. The Mace used today in the House of Commons was copied from that one used by the Mayor of Carrickfergus. It was a famous port in Tudor times. The fame of its yards, which turned out three-masted schooners, was known throughout Europe within the last 100 years.

Now, what of Belfast itself? Shipbuilding started there 160 years ago. One of its most famous yards, from 1880 to the outbreak of the second world war, was that of Workman Clark. The Lamport and Holt sisters, *Vandyke* and *Voltaire*, came from the Workman Clark yard. These big ships started the now popular liner cruises thirty odd years ago.

But Workman Clark also built scores of sailing ships; so did Harland and Wolff. I went to the Belfast museum expecting to find some representative models, particularly of sailing ships, but I was bitterly disappointed.

There were models of four cross-channel railway steamers, none of which was built by Belfast; there were a few Chinese model junks built in far-off China; and there was one case of cheap block silhouette models, such as were made for service recognition purposes during the war. It was difficult to believe that Ulster's two main industries are flax spinning and shipbuilding.

Both are exports of no mean order; both may be regarded as the lifeblood of Northern Ireland, yet her ships past or present are not worthy of notice by the museum.

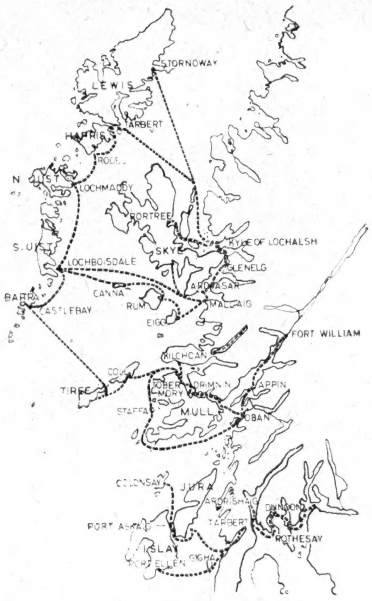
I observed that the motto on the city's coat of arms is " What return shall we make for so much ? " What, indeed !

Open boats

I NOTE with great pleasure the trend to open boats by many modellers. Mr. C. Berry, of Belfast, displayed a fine little model of a ship's lifeboat. It was well made and the detail work was surprisingly good.

I queried the absence of one and a half sets of oars as required by the Ministry of Transport and he told me that had he installed these, other work would have been hidden.

A fine display of models at the Belfast S.M.S. Exhibition



THE ROAD— TO THE ISLES—

W. A. C. SMITH recaptures the romance of the fleets which, for decades, have plied 'The Royal Route' to Scotland's island outposts

THE CHAIN of islands along the west coast of Scotland is served by a smart little fleet of passenger and cargo vessels which can trace their descent back to the dawn of the steamship era. The title "The Royal Route" has been used since a visit by Queen Victoria, and all the passenger ships plying it fly the Royal Mail pennant.

By the middle of last century the Burns brothers of Irish cross-channel fame were well established in the West Highland trade but in 1851 they handed over to an employee, David Hutcheson, who was joined by a nephew of the Burns, David MacBrayne. After twenty-seven years the latter became sole proprietor of the company and from 1879 carried on the business under his own name.

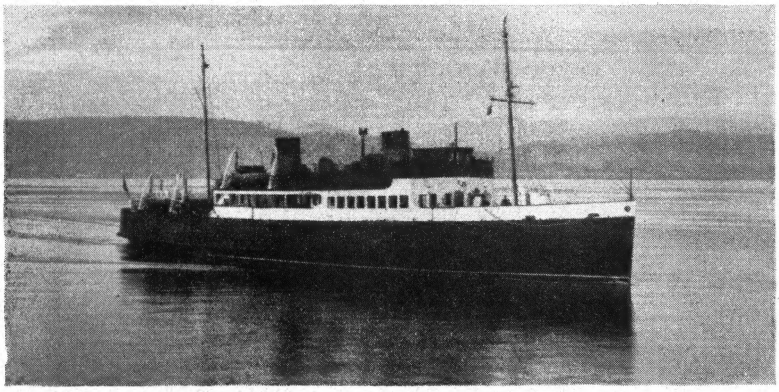
In 1905 David MacBrayne became a limited company and in 1928 it was acquired jointly by Coast Lines Ltd. and the L.M.S. Railway, following which a modernisation programme was put in hand together with the development of road services.

The steamer routes radiate from Glasgow, Tarbert (west), Oban, Mallaig and Kyle of Lochalsh, but it is rumoured that the Clyde passenger service will soon be abandoned when its steamer is disposed of. This is the triple-screw turbine *Saint Columba* which was built in 1912 as the *Queen Alexandra* by Wm. Denny and Bros. Ltd. at Dumbarton.

During the first world war, while on transport work in the English Channel, she rammed and sank a German submarine. She then returned to Turbine Steamers Ltd. until this concern was acquired by David MacBrayne Ltd. in 1935. The following year she appeared from Lamont's yard with a third funnel, being nicknamed the "Wee Queen Mary" and was placed on the Glasgow-Ardishaig service.

In 1937 her direct-drive steam turbines were converted to oil burning. During the last war she was a naval accommodation ship at Greenock, but in 1947 she was completely reconditioned and returned to the Ardishaig service which is now based on the railhead at Gourock.

Latterly her consort in turbine steamers was the twin screw turbine *King George V*, built by Denny in 1926 and originally fitted with two high-pressure Yarrow watertube boilers. Under MacBrayne she has been employed on the Oban-Staffa-Iona service and during the war acted as a troop tender. In winter she is laid up at Greenock with the *Saint Columba*.



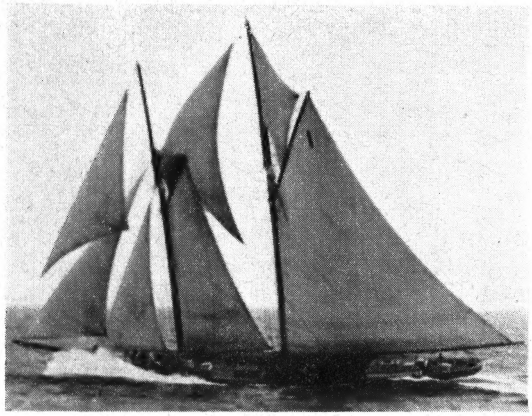
Two famous vessels

Without a doubt the most famous MacBrayne vessels were *Iona* and *Columba*. The former, third of the name, was built by J. and G. Thomson at Clydebank in 1864, and was a saloon paddler of beautiful design with curved slanting bow, square stern, two funnels and a single mast. Simple oscillating engines were installed.

Columba appeared from the same yard fourteen years later and although generally similar was very much larger—301.4 ft. long, with a gross tonnage of 602, and was built of steel. Accommodation was the finest of the period and novel features were the provision of a hairdressing saloon and a post office.

She operated the 7.11 a.m. Glasgow-Ardishaig service, with a daily consumption of twenty tons of coal, carrying wealthy tourists en route to shooting lodges and fishing hotels, until 1935. The following year she was broken up alongside *Iona*.

Several of the MacBrayne paddle steamers have been notable for their



The Gloucester Fishing Schooners—3

The main rigging details are discussed

by E. J. MARCH

THE PLANS SHOW a typical Indian Header, and the lofty rig at once attracts attention. The sail plan is a very pleasing one and calls for little comment save to remark that the fore staysail is laced to the boom and is known as a "jumbo," while the main topmast staysail is a very large, quadrilateral sail set flying on the weather side, and known as a "fisherman."

The hull has a very fine entrance and a bold sheer, giving an impression of grace and power. Bulwarks are very low for deep sea work and decks are wide and clear of obstructions.

Mark in the hull centre line on a suitable piece of wood, set out the deck outline on the upperside, and make a dotted outline on the underside. Cut out with a fretsaw and shape up with a file. Set out the sheerline and carve down to deck level, giving the usual camber, and leaving the bulwarks 2 ft. high amidships.

The main rail, 12 in. wide, follows the line of sheer throughout, and extra height is given to the bulwarks fore and aft as shown in Fig. 1. At the break of the deck is a rise of 9 in. to the raised quarter deck. Drill holes at the bows for the hawseholes—45 are needed—and shape up with fine round file.

Make fine slits with a razor blade below water line to hold shrouds 17 and 27. Drill two fine holes through the stem for the bobstays 43, and through the hull upwards towards bulwarks for the bowsprit shrouds 42, and another hole for the bowsprit.

Line in the bulwarks and deck planks with a sharp, hard pencil, noting that on the quarter deck the planks run fair with the curve of the bulwarks, while forward of break they are parallel to the centre line. Drill holes for masts at the correct rake.

The bowsprit lies close to the deck and follows the line of sheer, and beds in a single bitt, 4 ft. high, the top of which forms a crutch for jumbo boom. Then comes a windlass of the usual pattern, capable of being worked by hand, but usually fitted for power. Next is a vent and a small iron horse for the jumbo sheet.

The foremast has a semi-circular fiferail round, and immediately aft comes the entrance to fo'c'sle with the usual sliding roof and galley stovepipe to starboard, Fig. 2. In front of the entrance is a grating or more often slats fastened to deck.

A circular hatch and main hatch 5 ft. by 4 ft., with high coamings making for safety when decks are awash, come next. On either side of the hatch are the ring bolts to which the nests of dories are lashed. The great beam breaks the line of deck with a rise of 9 in. to the quarterdeck, where a small iron horse takes the foresail sheet.

Don't forget the stovepipe !

The mainmast has a semi-circular fiferail round, a crutch for the fore boom fitting in the front when required, Fig. 3. The pumps are just in front of another hatch. Aft is the raised cabin trunk, with skylight, companion and stovepipe on roof.

On either side of the wheel box are the quarter bitts, sided about 8 in. and some 21 in. high. A crutch for the main boom fits in just abaft wheel box when required, and in front of the taffrail is the main sheet box.

The bulwarks have cleats under, where shown. A pinrail is on each side under the main shrouds, and belaying pins in the main rail under the fore shrouds; also the fair lead for the jib sheet.

The anchor davits are of curved iron and take the place of the old wooden catheads. On the bowsprit is a cleat, and the fitting for the gooseneck of the jumbo boom. A pinrail is right forward. Outboard on top of the bowsprit is a wooden walk, making it easy for men to run out to handle the jibs.

No difficulty should be experienced in making all the fittings from scrapwood. Make anchor and fit cable of fine chain, passing a few turns round windlass.

The dories nest in fours each side of main hatch; in heavy weather they are lashed bottom up. They are 15 to 16 ft. long, with flaring sides, and are often painted in bright colours. It will be found easiest to carve the nest of four in one block, hollowing out the upper dory and cutting the sides in and out for the lower boats.

The hull is black, with gold cove bead, and scroll work round the hawseholes. Below waterline it is emerald green, red or copper colour. Inside bulwarks and top of the rail are white, and all deck fittings are painted white so as to show up as much as possible at night.

The spars are made of boxwood. They are varnished natural colour, or painted black for the outboard length of the bowsprit, white inboard. Masts are black, mastheads, gaffs and booms white.

Foremast measures—deck to cap 68 ft., 18 in. dia., masthead 11 ft. 6 in.; foretopmast—heel to truck 44 ft., $10\frac{1}{2}$ in. dia.; mainmast—deck to cap 76 ft., 18 in. dia., masthead 12 ft.; maintopmast—heel to truck 46 ft., $10\frac{3}{4}$ in. dia.

Score the topmasts at the head to take the rigging and drill fine holes for halyards 20 and 34. Make the caps, cheeks, etc., for the mastheads from thin wood or card. In winter the topmasts are sent down and left ashore.

Crosstrees—fore 20 ft., main 23 ft.; gaffs—fore 29 ft. excluding jaws, $10\frac{1}{2}$ in. dia., main 44 ft. excluding jaws, 13 in. dia.

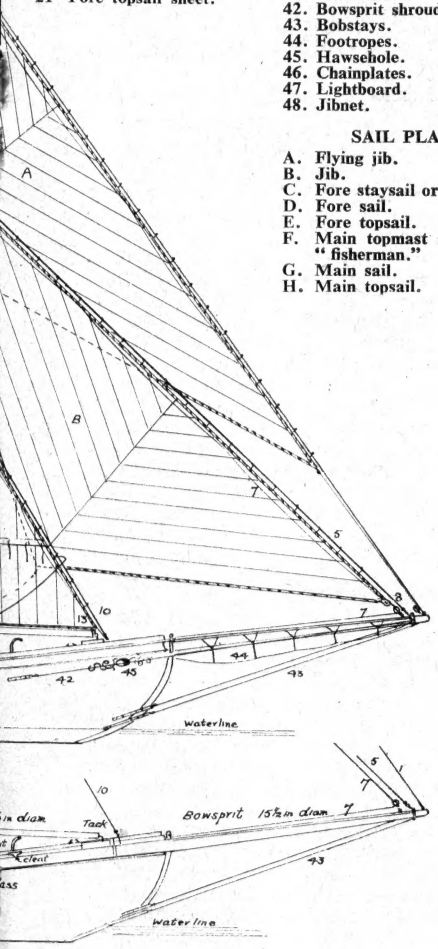
Drill a fine vertical hole near the jaws, pass a piece of copper wire through it and turn in eye at each end. The upper eye will serve for the lower block of throat halyards, and the lower

RIGGING PLAN

1. Fore topmast stay.
2. Flying jib halyards.
3. Flying jib downhaul.
4. Flying jib sheets.
5. Jib stay.
6. Jib halyards.
7. Jib downhaul.
8. Jib tack.
9. Jib sheets.
10. Fore stay.
11. Jumbo halyards.
12. Jumbo downhaul.
13. Jumbo tack.
14. Jumbo clew.
15. Jumbo sheets.
16. Reef band and points.
17. Fore shrouds.
18. Fore topmast shrouds.
19. Fore topmast backstay.
20. Fore topsail halyards.
21. Fore topsail sheet.
22. Fore topsail tack.
23. Fore peak halyards.
24. Fore throat halyards.
25. Fore peak line.
26. Fore sheet.
27. Main shrouds.
28. Main topmast shrouds.
29. Main topmast stay.
30. Main topmast staysail halyards.
31. Main topmast staysail sheet.
32. Main topmast staysail tack.
33. Triatic stay.
34. Main topsail halyards.
35. Main topsail sheet.
36. Main topsail tack.
37. Main peak halyards.
38. Main throat halyards.
39. Main peak line.
40. Main topping lift.
41. Main sheet.
42. Bowsprit shrouds.
43. Bobstays.
44. Footropes.
45. Hawsehole.
46. Chainplates.
47. Lightboard.
48. Jibnet.

SAIL PLAN

A. Flying jib.
B. Jib.
C. Fore staysail or "jumbo."
D. Fore sail.
E. Fore topsail.
F. Main topmast staysail or "fisherman."
G. Main sail.
H. Main topsail.



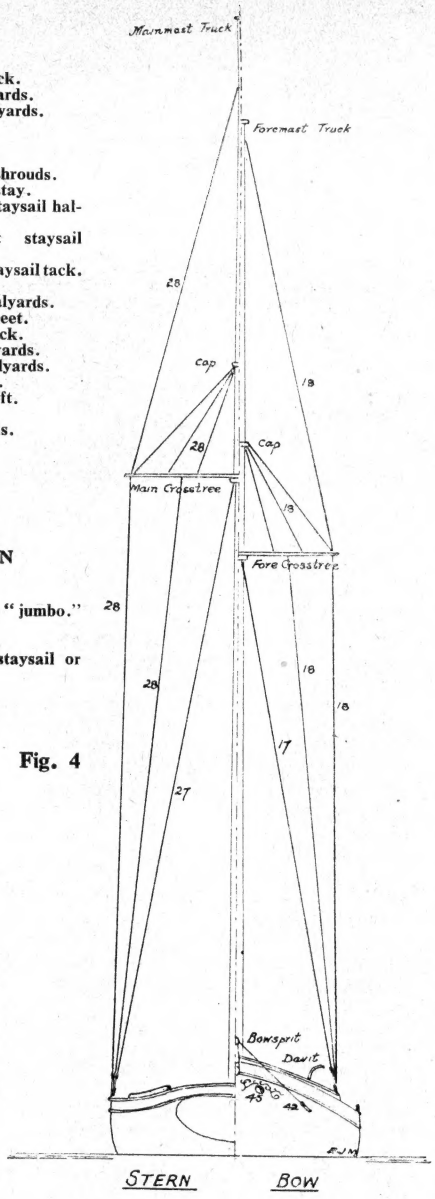


Fig. 4

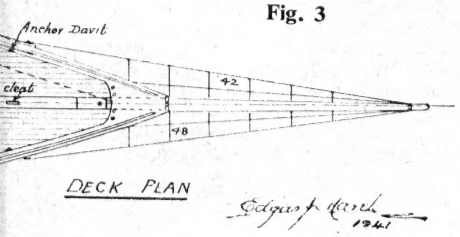
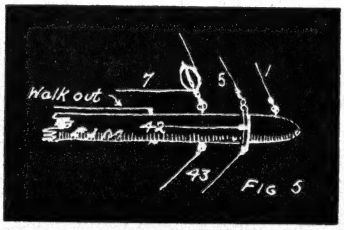


Fig. 3



for the topsail sheet to reeve through.

Booms—fore 29 ft., 8½ in. dia. (score for sheet 26 and fit a gooseneck on inner end), main 75 ft. excluding two jaws, 13 in. dia. (score for topping lift 40, and sheet 41, drill two fine holes at the outer end for the fall of the topping lift to reeve through, and for reefing tackles); jumbo 26 ft., 6 in. dia. (fit with gooseneck outer end, and score for sheet 15).

Bowsprit is 47 ft. overall, outboard 26 ft., 15½ in. dia.

Fit footropes, and score at outer the end to take rigging. Fit eyelet to take the jumbo stay 10, and the fitting for the boom. Drill a fine vertical hole for the jib stay 5. Glue thin strip, 12 in. wide along the top of the spar to make a walk out for men handling jibs, Fig. 5.

Cut out the sails from suitable paper. Pencil in all cloths, reef points and boltropes. Curve under ruler. Tie long threads through all the corners. Fine sew the foresail, mainsail and jumbo to their respective gaffs and booms; the foot of the sails has always to be faced to booms and never loose footed. Mark hanks on the luff of the headsails with pencil snicks. Fit wire rings to the luff of the fore and main sails and pass the lower masts through the hoops and step in the holes in the deck.

For the shrouds, tie throat seizing in bights of black thread and put over the mastheads, lead down into slits at base of the hull, holding with a touch of glue on the hull. If the slits finish just above the waterline the lower part of the shroud will not show when the sea is made up. Glue the ratlines across, and fit deadeyes.

Mainsail G, peak halyards 37—standing end set up on the port side of the deck, reeves through the lower block on through the single blocks on the gaff and masthead and on to one sheave of double block at the masthead and down to purchase on the starboard side.

Throat halyards 38—purchase goes to port. Peak line 39—reeves through small block at the end of the gaff and belays the pinrail starboard side. It also serves as a flag halyard.

Topping lift 40—standing end is fast to back of upper cap, runner tackle at lower end, fall leading through sheave in boom. Some schooners had extra topping lifts with several legs to take the weight of the inner part of boom.

Reefing tackles for the jumbo, fore and mainsail—a pennant with a hook spliced into one end is hooked into reef cringle, and the fall reeves through the sheave or cheek block on the boom and belays on the cleat under.

● *To be continued*

KEY

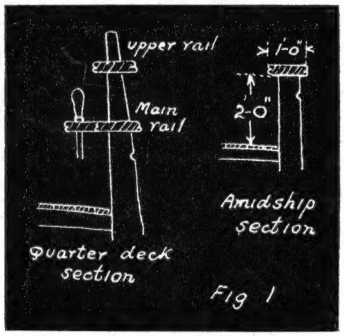
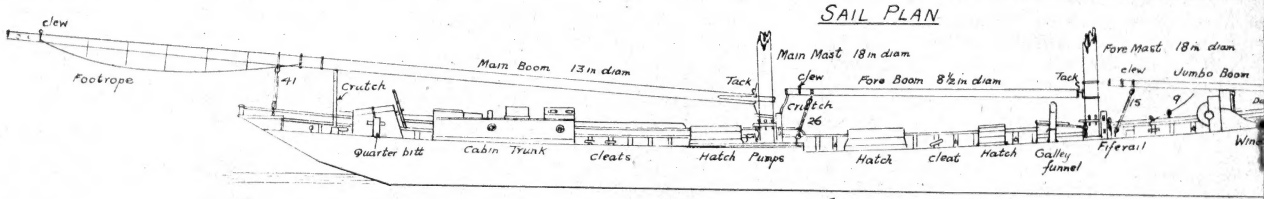
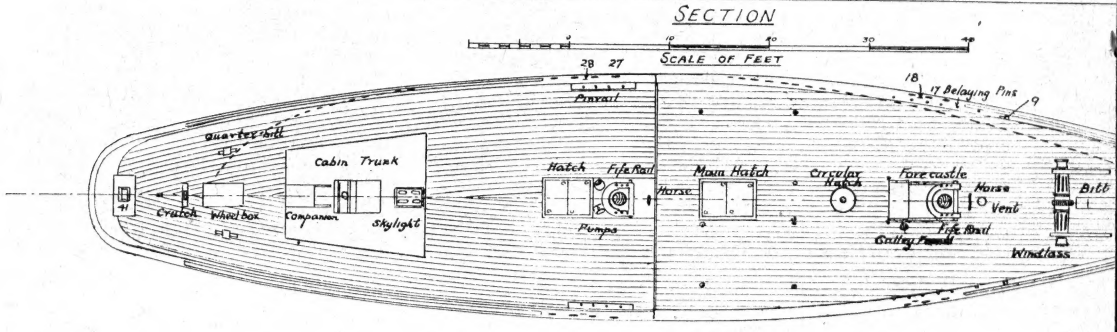


Fig. 2

SAIL PLAN



SECTION